LIBERALITY OF RAJA SIR SOURENDRA MOHAN TAGORE, K.T., C.I.E.

No. 114T.—M., dated Darjeeling, the 13th June 1898.

RESOLUTION—By the Government of Bengal, Municipal Department.

READ-

A letter from the Secretary to the Plague Commission, Calcutta, No. 2031, dated the 25th May 1898, submitting, for the information of Government, a copy of a letter from Raja Sir Sourendra Mohan Tagore, KT., C.I.E., in which he offers to place at the disposal of the Commission a house belonging to him at No. 10. Brojo Dullal's Street in Calcutta, for use as a Plague Hospital, as long as it may be necessary, for the people living in his immediate neighbourhood, including the residents of Natur Bazar. The Raja also offers to pay Rs. 1,000 for the equipment and maintenance of the hospital.

Read also-

A letter from the Commissioner of the Presidency Division, No. 41M., dated 6th June 1898, in which he brings to notice that, in a letter addressed to him, the Raja has further offered to place his garden house at Sintee, on the Dum-Dum Road, with its extensive compound, at the disposal of Government for use as a Plague Hospital or a Segregation Camp in case of necessity. The Raja has, it is further reported, addressed the Collectors of districts in which his estates are situated offering his help and co-operation in the matter of any anti-plague measures that may be found necessary.

The Lieutenant-Governor is extremely gratified at these instances of the Raja's liberality and public spirit, and desires to express his thanks for them. His Honour trusts that the example of liberality and charity set by the Raja may be followed by other wealthy men. A copy of this Resolution will be published in the Calcutta Gazette.

WEATHER AND CROP REPORT.

For the week ending the 18th June 1898.

Burdwan.—Rainfall at Sadar 38, Kalna 33, Katwa 02, Raniganj 91. Weather rice selling as follows:—

7 78 5				Orn.	
Sadar	***	3.94	***	111 to 16	1
Kalna	***	***	464	12 to 131	1
Katwa		494		$13\frac{5}{2}$	per rupee.
Raniganj	- 484	***	- 100	13)

Birbhum.—Rainfall at Sadar 16, Rampur Hat 2-25. Weather hot and cloudy. Rain urgently needed at Sadar. Prices stationary. Fodder sufficient.

Bankura.—Rainfall at Sadar 12, Vishnupur 99. Weather hot and cloudy at intervals. More rain wanted for cultivation. Prospects of sugarcane and til good. Fodder and water sufficient. Common rice sells at 14 seers a rupee at Sadar and Vishnupur.

Midnapore.—Rainfall at Sadar 3.44, Contai 1.46, Tamluk 1.92, Ghatal 89. Prospects of indigo and sugaroane hopeful. Ploughing and sowing going on. Prices of common rice are as follows:—

						Srs.	
Sadar		100	864	464	440	13 \	
Contai		244	***	-141	13	to 16	
Tamluk		119	Ann.	****	441	124	per rupee.
Ghatal	100	200	***	***	400	12	

Hooghly.—Rainfall at Sadar 1.82, Scrampur 1.12, Jahanabad 2.11. Ploughing in full progress as well as sowing of aus and jute. Common rice sells from 10 to 12½ seers per rupes.

Howrah.—Rainfall at Sadar '47, Ulubaria '73. Weather hot. Sowing of ans and amon going on briskly. Jute progressing favourably. Fodder and water sufficient. Common nee sells at 10 to 12 seers per rupes.

24-Parganas.—Reinfall at Sadar 1·19, Barasat 2·05, Basirhat 2·12, Diamond Harbour 1·97. Weather hot. Ploughing and sowing going on. Young plants of sus and jute doing well. Fodder and water sufficient. Common rice sells as follows:—

	1		Srs.	
Sadar	***	***	10 to 12	1
Baraset	191	904	101	
Basirhat	400	004	13	per rupes.
Diamond Harbour	2.54	900	114	

Nadia.—Rainfall at Sadar 82, Kushtia 1.62, Meherpur 4.47, Chuadanga 1.76, Ranagbat 57. Aus seedlings have suffered a little from incessant and heavy rain at Meherpur. Weeding and harrowing going on in other places. Common rice selling at 10 to 13 seers per rupes. Fodder and water sufficient. No cattle-disease.

Murshidabad.—Rainfall at Sadar I 65, Jangipur 22, Kandi 2 35. Weather seasonable. Bhadoi and jute plants thriving. Til, indigo, mulberry, and sugarcane doing well. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

		1 . 7			Srs.
Badar	***	****	***	414	1217
Kandi	449	441	***	2 200	131 per rupes.
Jangipur	***	646	494	100	14]

Jessore.—Rainfall at Jessore 37, Jhenida 1.40, Narail 58, Bangaon 3.42. Ploughing and sowing of cus and aman still continue. Standing crops doing well. No cattle-disease reported. Fodder and water sufficient. Common rice sells as follows:—

				Srs.	
Jessore Themid	***	444	***	11 to 12 3	
Jhenida Banana	100		A 244	10	1
Bangaon Narail	100	200	101		per rupee.
TIGIGIT	***	444	9.94	11 6şch.	

Khulna.—Rainfall at Sadar 85, Bagerhat 44, Satkhira 49. Weather seasonable, Cultivation of aux and aman paddy going on. Fodder and water available. Common rice sells as follows:—

Seder ... 11 to 18 }
Bagerhat ... 13 } per rupee.

Rajshahi.—Rainfall at Sadar I-87, Nator 2-50, Naugaon 3-87. Prospects of crops good. No cattle-disease. Fodder and water available. Price of rice ranges from 11 to 13 secret per rupee.

Dinajpur.—Average rainfall '76. Weather cloudy and sultry. Condition of standing crops good. No cattle-disease. Fodder and drinking-water sufficient. Rice selling at 13 seers per rupee.

Jalpaiguri.—Rainfall at Sadar 4.93, Alipur Duars 6.18. Weather hot. Cultivation of haimanti paddy going on. Recent rain has done some good to standing crops. Fodder and drinking-water sufficient. Common rice sells from 8 to 14 seers a rupee.

Darjeeling.—Rainfall at Darjeeling 1.00, Siliguri 2.24, Kurseong 13. Weather seasonable. *Hills—Bhutta* and potatoes being harvested; chlota marua progressing. *Terai—Bhadoi*, jute and sugarcane progressing. Prospects good. Coarse rice sells as follows:—

Hills—9 to 10 seers per rupee. Terai--13 to 15 , , ,

Bhutta sells from 18 to 28 seers per rupee.

Rangpur.—Rainfall at Sadar 1.46, Gaibanda 1.36, Nilphamari 1.29, Kurigram 87, Weather excessively hot. Weeding of inte continues. Prospects good. Price of common rice stationary. Fodder and water sufficient.

Bogra —Average rainfall 1.60. Lands being prepared for aman. Fodder and water sufficient. Common rice selling from 9 to 12 seers per rupee.

Pabna.—Rainfall at Sadar 1.25, Sirajganj 1.13. Weather hot and cloudy. The rain has done good to crops and prospects are very fair. Common rice sells from 10 to 12 seers generally except at Dulai thana, where it is 91 seers a rupee.

Dacca.—Rainfall at Sadar 69, Manikganj 28, Munshiganj 185, Narainganj 78. Weather seasonable. Prospects of standing crops good. Fodder available. Na cattle-disease. Common rice 10 to 11 seers per rupee.

Mymensingh.—Rainfall at Sadar 68, Netrokona 26, Jamalpur 25, Tangail 240. Weather hot with occasional showers. Prospects of standing crops good. Water sufficient except at Netrokona. Common rice 94 to 11 seers per rupee.

Faridpur.—Rainfall at Sadar 1.46, Goalundo 2.07, Madaripur 2.91. Weather warm and muggy. State and prospects of aus fair and of amas and jute good. Fodder and water sufficient. Common rice 11 to 11½ seers per rupes.

Backergunge.—Rainfall at Sadar 1.06. Weather showery. Prospects of crops fair. Common rice sells from 8 to 12 seers per rapee.

Tippers. — Weather hot and cloudy. Rainfall at Sadar '27, Chandpur '18. Paddy and jute thriving. Sowing of aman paddy still going on in Sadar subdivision. Fodder sufficient. Rice sells from 9 to 11 seers per rupee.

Chittageng.—Rainfall 12. Weather het. Lands are being prepared for aus, and in some places being sown. More rain is wanted. Rice selling at 9 seers per rupee.

Noakhali.—Rainfall at Sadar 2-19, Feni 31. Prospects of crops good. Cattle-disease reported from Senbag and Ramganj. Fodder and water available. Price of rice 9 to 12 seers per rupee.

Patna.—Rainfall at Sadar '97, Barh 1'47, Bihar nil, Dinapur nil, Hilsa '25, Bikram '67. Rain has facilitated bhadoi sowings. Paddy is also being sown. Prices stationary. Common rice selling at 151 seers per rupee in Patna. Fodder and water for cattle sufficient.

Gaya.—China harvesting over. Sugarcane doing well. Fodder and water sufficient. Rice sells at 13‡ seers, barley 22 seers, wheat 15‡ seers, gram 10 seers, arher 19‡ seers, and make 20 seers per rupes.

habad.—Rienfall at Sadar '02, Buxar '11. Rain wanted. Sugarcane slightly in Nasriganj by insect. Fodder and water sufficient. Common rice sells at 3 seers per rupee. Cattle-disease in one village in Sasaram.

an.—Rainfall at Sadar '56, Siwan '20, Gopalganj '28. Weather seasonable. Very good. Fodder and water sufficient. Cattle-disease still reported. Average secommon rice 12.9 seers and makai 20.2 seers, against 7.12 and 7 seers respectively

mparan.—Rainfall at Ramnagar '10. Weather hot. Sowing of bhadoi and aghani a. Mung and china being harvested. Sugarcane and indigo doing well. Fodder and ficient. Common rice sells at Sadar 11 seers, against average 13 seers per rupee.

saffarpur.—Rainfall at Sadar '66, Hajipur '14. Prospects good. Rain wanted to the sowing of the crops. Those already sown are doing well. Prices are—comall to 13 seers, wheat 13 to 15 seers, barley 22 seers, makai 19 seers, gram 17 to and rahar 22 seers per rupes.

changa.—Rainfall at Sadar and Samastipur nil, Madhubani 15. Prospects of rope good. Sowing of bhadoi going on. Fodder and water sufficient. Common at Sadar 10 seers per rupee.

ghyr.—Rainfall at Monghyr 12, Begusarai 1.25, Jamui 1.57. Weather hotwings going on. Indigo and sugarcane doing well. No cattle-disease. Common

Monghyr
Begusarai
Iamui

12 to 13; seers per rupee.

11 to 13

"""

12 to 13; seers per rupee.

alpur.—Weather seasonable. Rainfall at Sadar 16, Banks 80. Bhadoi sowings Indigo, sugarcane and other standing crops doing well. Fodder and water-supply Cattle-disease reported from Supaul and Madhipura subdivisions. Price of ce stationary.

bhadoi paddy nearly finished. Standing crops doing very well. Prospects excelle-pox in a few villages in Araria subdivision. Fodder and water sufficient ice selling at Sadar and Araria 16 seers, and at Kishanganj 15 seers per rupee.

L.—Rainfall at Sadar 35, Chanchal 1-17, Shibgani 41, Gajole 1-15. Weather Bhadoi sowings going on. More rain wanted. Price of coarse rice 13 sears per dder and water sufficient.

al Parganas.—Rain at all subdivisions—average '91; Dumka '18 only, more Ploughing progresses favourably elsewhere. Cattle-pox reported in Dumka. water-supply improving. Price of rice 13 to 14½ seers, and of maize 16½ to 20 spee.

sttack ... 12 8 ... 15 12 per rupes, ... 18 6 per rupes, ... 16 13

re.—Rainfall at Sadar 1.07. Sugarcane growing well. Harvesting of cotton Ploughing and sowing of sarad in progress. Aus seedlings are out in places. varies from 13 to 18 seets per rupee in the interior. Rice sells at 14 and 17 see at Balasore and Bhadrak respectively. Fodder and water sufficient.

-Rainfall at Angul 2.22, Khondmals 1.77. Sowing of paddy and bhades crops Prices stationary.

Rainfall at Puri 1.31, Khurda 1.57. Sowing of sarad and bealt briskly going the and cotton growing fairly well. Fodder and water sufficient. No cattle-ted. Common rice sells as follows:—

srs. ch.

11 13
14 7
14 7 to 15 12

agh.—Rainfall at Sadar 24, Giridi 24. Rain badly wanted for ploughing.

Lohardaga.—Rainfall '08. Sowing of gundli and paddy continues. Rice sells at Ranchi 11 seers per rupee and in the interior from 11 to 16 seers per rupee. Cattle-disease continues. Fodder and water sufficient. Grain in stock sufficient.

Palaman.—Weather very hot. Mahuadanr and Ranka report good rain; elsewhere it has been slight; none at Daltonganj. Gora dhan and bhadoi crops are being sown in parts. Sugarcane and gundli doing well. Rice selling from 12 to 16 seems per rupes. Water and fodder sufficient.

Manbhum.—Rainfall at Sadar 1-23, Gobindpur 36. Weather seasonable. Prospects of crops on the ground good. Sowing of paddy going on. Cattle-disease reported from thanas Purulis and Chandil. Folder and water sufficient. Average price of common rice at Sadar 13; seems and at Gobindpur 12 seems per rupes. Supply sufficient.

Singhbhum .- Rainfall 88. Rice plentiful; price from 12 to 14 seers per rupes.

General Summary.—There was rain over almost the whole of the Province during the week. The present agricultural prospects are favourable. Ploughing and sowing are in progress, and the aus rice and jute already sown are doing well. More rain is required in some parts. Reports of the sugarcane and indigo crops continue satisfactory. The china and many millets in Hihar are still being harvested, and the cotton crop in Orissa has begun to be gathered. Prices were generally stationary. Cattle-disease is still reported from Noskhali, Shahabad, Saran, Bhagalpur, Purnea, Cuttack, Lehardaga, and Manbhum. The supply of fodder and water is generally sufficient.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT, The 14th June 1898. M. FINUCANE,

Secretary to the Gont. of Bengel.

Results of the Meteorological Observations taken at the Alipore Observatory from 5th to 11th June 1898.

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e	7th	152-0	4.0	-550	83-4	88-6	12 0	78-5	79.7	-907	78-2	15	BE by S and SSW	94	0.03	Chiefly cloudy, d,
*	8th	151-5	5-2	-584	85.0	91-8	12:1	79-2	80.5	1983	78-7	82	8E by 8, and 89E	99	Ni	Partially cloudy.
26	9th	169-5	2:8	-578	84.7	89-2	98	79-4	80-8	*990	79.2	84	SE by Sand SEE	110	91	Chicaly cloudy, o.
12:	lOth	160-8	1.8	570	82-6	80.2	11-1	79-4	79-7	*076	78-5	87	SE by S and variable.	.08	0.42	Chiefly cloudy, o
n	11th	149:7	8-1	-697	85-9	92-9	18.8	78-4	79-9	'941	77.4	76	BSE	120	0:11	Partially oloudy
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the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, shed open at the sides, and are suspended four feet

The barometer readings are corrected approximately to allow the finish between the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

O, overcast; p, passing temporary showers; d, drizzling rain; t, thunder.

LIMITATION OF LEDIA, GOVT. OF LEDIA, Calcutta, the 15th June 1898.

J. H. GHAHARD, For Meteorelogical Reporter to the Goot, of India.

Meteorological Report of the Province

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-	Division,	Dura	ICT.		Rapresentati	Yn	Highest, 6 A.M., baromater read- ing.	Lowest, 8 A.M., varometor read- ing.	Hean, S.A.M., reduced to Mr.	Mean reduced to sea-level and constant gra- vity, Lat. 45°.	Variation from normal mean,	Mean direction at 8 a.m.	Mean velocity in miles daily.	Elighent of month,	Lowestolmousb.	Mean daily maxi- man tempera- ture.	Mean daily mini- noun tempera- ture.	Heat daily lam-
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1	No.	24-Pargaman Unicutia	104	100	Oalgutta	580	20'802	23.258	29.702	29.669	'015	BISON	165	103'4	70.7	9816	815	1
۱	MAN - 1	Natia.	988		Kelahuagar	SEC.	29*797	20.949	89 672	29.007	-	83°E	183	107%	87°S	0.96	179	1
Ì	Presidenty	Rurshidahad	161	1161	Barhampore	TI:	19788	29'544	291685	20.626	- 7013	B17°H	104	108-1	663	9914	76'8	1
1	1	Jemore	- 003	107	Jessore	991	291810	29'084	80.958	201678	025	N DSTE	130	106.0	01	97'0	76%	
ŀ	The second	Khulna	803	Alpa	481401		16 10	3.944	100	4111	800	189		-1111			7618	
ŀ	Political of	Rajshahi	941	100	Rempur Heal	śs.	201792	291536	791050	29'673	019	880°E	150	108-0	65'1	(a)	(a) 76-8	
I.	BOLE T	Dinajpur	464	die	Dinajpur		39-766	19'459	191004	90:081	-'017	803°B	100	106-3	68-8	93%	(a)	
Ī	Section .	Julpaiguri	160	. 161	Jelpeignei	661	39'688	10201	89.489	29.683	-'086	BTT B	76	97-4	667	88%	790	
l	Rajahahi(Durjosling	119	611	Darjeeling .		\$3'013	99 887	221943	1-3	0	N51°E	180	78'3	4819	667	A1-6	
I		Cooch Behar		desid.	Cooch Behar	***	29'737	28'436	29'884	29'697	_	E	53	95'6	ahan		2.1	-
ı		Bangpur	rise	-	Rangpur	***	29.768	20*487	(b) 29'632	(b) 29:710		B84"E	(a)	89.4	671	87°0 (a)	78.7 (A) 73.4	1
ı	The same of	Bourn	110	541	Bogra	801	23*832	29'348	29.078	920-686	44	-	- 00	109.8	67:3	34'6		i.
l		Pabna	100		Sirajgan)	m.	22'807	39-534	2011278	291677	-1080	Base E	80	101.8	007	157	7610	1
l	CENTE !	Duccu	inter	en.	Namyunpanj		29'863	29'594	29.320	291700	-'018	828°B	188	991	69-8	9971	70'8	1
ı	Danus	Mymensingh	601	141	Mymonsugh	201	99'811	20.240	80.400	29-711	-1881	B69* K	40	97:3	8.99	90%	24%	1
l	2000	Vacidpur	734	191	Parldpur	77.	29.850	201684	29-706	99-700	— 921	65°E	81	1088	08'6	54-9	76%	
ı		Backergunge	191	411	Barbal	No.	29 868	\$18:02	29.738	1011026	008	B10°B	70	100'3	00.3	937	27-9	
ı	PILE (Tippers	100	57.1	Comilla	Sec	39:865	29.272	20*729	22-706	-	881°B	188	08.9	66·B	94-6	75'9	1
1	Ohiteagong	Nonkhali	180	Max	Nonkhali	841	20 849	201360	80-718	29.708	-	84°W	136	94*0	65-9	907	7519	
-	William A	Chittagout	Ho Po-	844	Chitsagong		59:511	29'540	29'601	29-725	'017	847°E	116	76'2	8.89	014	101	1
-	The second	Chittagong Hill Patna	th ra	669	Bauk pore	31-	90'602	20.008	99°40B	10-032	-1017	879°E	155	105.0	80°8	101.2	760	
		Gays	44	70.	Gaya	101	29'611	191,70	291509	291626	1018	S60°B	208	213.2	71.8	1679	86'5	4
	80-711	100		0	Debri	114	201438	20*199	20:316	29'616	'080	810°W	(0)	118.5	72.5	1071	80.2	1
	125 301	Shabahad	40)	10-5	Busar	(16	29'641	20'310	29'454	20.838 (9)	-411	N79'E	(9)	110.0	69'6	103'5	78'0	1
	Patna	The state of		1	Arrah	mq+	99*679	101580	29'474	29'616	-	880°E	354	109'4	09'5	105'6	77:3	1
ı		Haran	pase .	410	Chapra		201031	291309	291503	20 638	-	884°B	140	108'8	na	109-3	779	1
	35.5	Champeran	984	275	Mothari	101	10.031	20'348	19'488	19:650		Na3°B	201	104/0	65.8	97-0	71.9	1
		Мизапагрог	1000	per	Musaflarpur	212	29'013	29-389	39"402	201624	-	885°E	146	104.2	68.3	96'4	79'8	1
1		Harbbanga	-	91	Darbhanga	dae	29'044	99'404	23-524	29 644	~~4087	Sen. R	100		69'3	-	748	^
1		Monghyr	ME	de-	Whenter		densite	BALONA.	******		1				100			,
Ì,	Bhamlpur	Purse	-		Bhagaipur Purnea	9/11	291655	20'448	29.635	29'847		N87°E	122	1128	68:1	1,00'3	(a)	-
ŀ		Malda	100	Es1 .	Malda	411	19:830	19:501	28.438	29:662	-1092	N87°E	143	105.3	65'3	9819	784	31
ľ		Southal Parge			Naya Dumka	"	29-321	20-107	39*218	29-654	-1007	845°B	71	106'1	67'0	101.4	7618	18
l				(Cuttuck		89 778	18.033	201448	201070	-4007	841°W	66	108.0	781	101-9	807	1
1	Par de f	Cuttack	"	-1	False Point	201	29'838	29*000	29-717	39-679	-'003	S49°W	120	90'5	891	91.7	79:5	8
I	Ortion	Rabassa		(Balazore	1	99-755	89-846	291063	29*657	-,000	837°W	199	108.9	67'8	99'7	5.87	
۱	2000	Balasore	rig	-1	Shortt's Islan			Therese		100	- 1		41					
	100	Pari	1884		Purs Gepaleur	977	29:883	29°539	29-721	201086	-	843°W	\$54	94'8	71.6	917	88-7	
1	1	Bestriegh	200		Ensaribugh	Par.	29 867	201005	29-715	\$9*676		SSTo.M.	460	94'3	741	108:4	77'0	- 50
1		Lohardage	AND	-	Ranahi	*40	27.815 37.716	27:500	271705	\$9,630	+ 1001	Berow	890	103.6	67 %	101/2	38.6	. 5
	Chota Mag-	Palaman	1000	244	Daltingunj	tite In a	201718	20.841	281986	20'630	+ 7001	845°W	205	106'8	704	701.2	3810	9
1	Dark,	Manbham	191	301	Leans.	255	200	- 001		ML ADO	W.	8672	10	113%	70'8			
	win.	Storbbham	Table.	686	Chaibnesa	947	99'951	28-846	19:548	20'645	-	Bac*W	1	113-7	78-5	108.0	70%	. 5
1	1	Elbesger	-	100	Sibsegar	may	20 000	19-287	29'454	19:747	-1986	M2742	173	94/2	67.6	(a)	70'9	9
1		Goslpara	- 198	-	Dhahei	me s	29'778	29:478	59-037	19 708	1898	H88°III	173	657	067	87'8	731	8
6	, A	Caobac	- TO 1	- Ase	Bilchar		30'506	29*580	29-610	29745	-015	N73°E	-	100'1	-	967	75'3	3

to the month of May 1898,

			- 1	DISTRICT OBSERVATIONS. RATEFALL— Of month. Since 16th May 1895.									1000	
N.	OI	OUD.		-		Elivi		Bar	BRALL-			10.2	1	
-	100			-	-	Of mon		1.5		Bince 1	6th May 1			DINTRICA
	Mean shoult, 1 4.M.	Variation from morned mean, 0 4.30-	Rain-	Stone of dis- trick,	Normal attent.	Variation from Mean,	Number of reiny days.	Northal nests namb ber of rainy days.	Menn of dis- tries.	Normal mean,	Variation.	Mean num- ber of ratay days.	Normal mean num- ber of ming days.	
1	8'5	-0%	0°8% 5'87	8:49	8.63	-1.23	5:30	6*98	1149	2 98	-1'66	1'80	5-97	Bardwan.
	81	-		3.	438	-0'41	5'75	5*88	1-20	274	-1764	1:78	8:35	Blebhum
	21	-	2:63	211	6180	-8:69	4:00	5180	0.20	313	~2'85	1'80	8'50	Bankure,
	11	-	1.20	9199	5'29	-2:30	0.00	6'47	1.10	5.11	-2'01	1167	3.23	Midnapore,
		- 70	100	7°19	5'29	+1.00	6*00	7:37	3'14	2.70	+0.33	243	9-83	Hooghly,
		1.00	1	88'11	\$146	~-2'78	6.00	794	1'29	\$178	~1.43	3.00	3.08	Howrels.
9	4 67	+0%	1'90	4'53	B-45	~0'94	5.78	7:44	\$16	2.33	-0.78	9'71	4104	\$4-Pargapas.
1	414	-0'4	4:08	4'08	5'48	1'37	8.00	7'94	1.00	8'08	-1/19	2'09	2.43	Calontta.
	49	-	9.83	718	G*48	+0'94	7*40	818	6148	9:61	+1-87	4'60	4164	Nadia.
ı	11	-01.	7:00	5.03	5'27 5'27	+0'80	7'11	7'88	8/66	\$:38	+0.44	8166	479	Murchida bad.
2	916	-0.2	16-71	0'96	6'40	+2.68	10:00	8-89	7'88	\$160	+3'67	7160	4160	Janeore,
				9'50	6.40	+8.03	10.00	7-75	0720	3'26	+9.98	7188 6100	4:18	Khulne,
۱	(0)	-	7'57	6.08	5'96	+0.00	9.80	7-90	4°28 3'56	378	-0.83	500	3.88	Rajahahi. Dinajpur.
	13		7:17	19'45	18:27	+078	12-25	19:48	2'04	7-87	-5'83	8100	714	Jalpaiguri.
	(p)	-210	6'38	7-24	11'38	-016	1178	13*88	3.00	7:29	-8:36	875	7.58	Darjeeling.
				20.00	14'01	1720	1040	20104	-	man.m	-612	Quine.	8408	0.12
ŋ	(b)	-	12.78	12:61	11.07	-1°40 -4°78	1878	11:37	3'59	876	-9.43	8*75 4:50	8'08	Cooch Belier
1	26	-	7'55 9'08	7:34	7'94	-0.00	10'83	0.50	275	6.88	-1.88	9.00	2.33	Rangeur.
	98		7'09	0.68	7.75	-1.08	7.00	9*03	8.79	4'48	-0.65	6.00	6.09	Blogra. Pabna.
	63	+17	6'68	8-97	9160	-0168	8140	11'18	4'95	5:31	-0.85	4190	5'47	Daona,
	428	-	10'96		11'05			11/80	-	410			6169	Mymensingh,
	(0)	-1	970	6'63	B:80	0*00	10:33	10'81	8-70	4/49	+ 5-21	2'67	4°98	Paridpur,
ì	- 8-8	-	8127	9*66	8:10	+134	9.17	9.88	7105	4/37	+3'66	7'17	4.88	Backergunge.
Ì	61	-	10'56	192	10'89			10:80	3.17	6:33	1		8.30	Tippera.
I	-	-	1076	8"28	10.93	-118	8'80	10.88	613	6-79	+0:36	4'26	-5154	Noskhali,
l	69	-0.3	0.68	\$190	31'64	-6'84	7'40	10143	894	6:80	-3.61	4140	5 81	Chittagong.
H	51	-11	1*89	8*26	11.38	-0°18	6'00 8'17	1918	0.48	8*61 1*88	-6'48 -0'92	8'00	1'48	Chttagong H
	32	-0.8	MI	0.30	1'45	-125	0.45	1785	0.39	1.05	0.50	0.33	1'15	Patna. Gays.
1	3'0	-	Nil	0.10		1		4.00	0.30	1.00		0.00	1.10	Gegra,
-	(0) 1%	-	0.06	0*18	1'08	-0.88	9780	1.76	0106	0:57	-0.03	0-17	1.00	Shahabad,
	19		0.86		1.77	+0.68	8167			1.000	-0-11		21.00	. 3.50
ı	4%		1'05	1'88	2105	+078	5'50	273 4'14	0.69	1'65	-0'11	276	1:45	Saran.
ı	10		4753	4.02	8:18	+1.80	5'16	8:80	3'45	1'47	+0.38	3.67	2.03	Ohamparan. Muzaffarpur.
i	116	-14	8166	4*29	2.58	+176	0'40	5'60	9-01	146	+0'55	5.00	1/89	Darbhanga,
I	0	100	-	1186	9100	+0.35	B'60	E-88	9:09	1.77	+0.58	1'80	1'40	Monghyr,
i	219	144	4107	440	9:81	4-0159	5'83	4'45	.9140	9'51	+0108	5'83	3'58	Shagalpur,
j	10	+1/8	4.60	1	5'80	100	- 19	0.23		8.76		-	370	Furnes,
ı	818	-	3148	5104	4:08	+0'95	2'90	2'72	275	8:13	+ 0.63	4*75	3'47	Malda,
	48	-	1.78	3	8-65	- 3	1000	5.09	1	2.38		-	\$183	Sonthal Pare
	47 57	+11	1.08	2-78	4'57	-1'96	5'95	4'91	1'57	8152	-1'75	8168	2:86	Outlast.
	11	7-	\$160	8:08	679	-2'07	5'67	6.92	1:81	8:36	[-1'99	2'60	3.88	Balmore.
1	79	=	813 0160	2+35	8136	-1:00	3'40	2164	1.80	316	-0'98	3:00	3194	Pari.
	Bra .	-03	0:19	0.50	292	-0149	3100	8'82	0"20	1.84	-1146	9:67	1-98	Hasaribagh.
1	3.5	-	1182	1.76	8.81	-1.105	840	8'93	1'15	1.60	-0.45	2.00	178	Lohardaga,
J	3.0	+	0.09	0*25	/1/13	-0.83	9-76	1.88	0786	0.86	-0.11	0.32	1.39	Palamen,
J			150	1273	818	-0.88	3.72	6'61	3'66	934	- 0*70	1'07	9165	Masbhum,
	(6)	-	3.03	8168	8160	-121	6125	5-71	1418	9/81	-1'45	2'50	3'44	Singhbham.
ı	19	•	13.00	1		DY 3	30	17 17	655				- 1	Sibonene.
1	13	0	13-10	1	1831-	5	100			1,13	1.24		7 × 8	Dhubri,
4		-0.6	003		1866		100			Li F	1		America	Onclour.

Table of Rainfall recorded at a

Est caralogical Divi- nion.	Division.	District,	Station.	1			•	5		,	В	•	10	ıı	11	18	14	10	10	11	11
Вирелт.	Bendwan.	Birbhan Bankura Heoghiy	Hotsingur Rampur Hai Bolpur Myrari Labpur Baokurs Vishnupat Maliara Khatra Indas Kotalpur Onda Gangajaighati Baipur Sonamukhi Contai Tambuk Midnapore Ghatai Kukrahaty Garhiesia Pessabara Banabad Howah Midnapore Hooghy Jahanabad Howah	100 mm 1	(82) 942 942 944 944 944 944 944 9	100 cm	0°01 0°65 0°01 0°25 0°36 0°36 0°36	0700	0°04 0°01 0°14 0°16 1°05 0°05 0°05 0°05 0°05 0°05 0°05 0°05	500 500 500 500 500 500 500 500 500 500	0'97 0'18 0'08 0'00 0'10 0'05 0'05 0'67 2'19 0'87	0°78 0°39 0°78 1°38 1°18 1°196 1°196 1°196 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197 1°197	0'78 0'39 1975 0'08 0'077 0'25 0'10 0'25 0'10 0'25 0'10 0'25 0'10 0'25 0'10 0'10 0'10 0'10 0'10 0'10 0'10 0'1	0.30	1759 0730 0730 0730 0730 0730 0730 0740 0740	0°08 0°40 0°47 0°50 0°50 0°50 0°50 0°50 0°50 0°50 0°5	0°85 0°81 0°16 0°19 0°19 0°19 0°19 0°19 0°19 0°19 0°19	000 000 000 000 000 000 000 000 000 00	100 000 000 000 000 000 000 000 000 000	Total Control	BESTERN SERVICE CONTRACTOR SERVICES
#OUTS.Wisse	Printdeacy	64-Parganas.	Mohesreka (Tsubaria Baugor Island Dismond Har bour Canning Tow Alipore (Obses vatory), Barraok pore, Dum-Jum Barsant Ramithan Ramsghat Krishnapar Ohundangan Mehorpur Laibagh Asimgnaj Jangipur Laibagh Bartal Nasati Jassore Jhanidah Magura Bangana Battalira Bagorhat Ragorhat		104 104 104 104 104 104 104 104 104 104	904 904 905 906 906 906 906 907 907 907 907 907 908 907 908 909 909 909 909 909 909 909	0.33	604 600 600 600 600 600 600 600 600 600	0°08	**************************************	1488 0 42 0 83 0 83 4 18 0 18 4 18 18 18 18 18 18 18 18 18 18 18 18 18	0 000 000 000 000 000 000 000 000 000	0 153 0 150 0 120 0 121 1 122 2 133 1 123 0 123 0 123 0 123 1 122 0 123 1 123	0726	013 111 012 012 012 012 012 012 012 012 012	0.00	0°36 0°30 0°46 0°46 0°46 0°30 0°30 0°30 0°30 0°30 0°30 0°30 0°3		100 (100 (100 (100 (100 (100 (100 (100	Sept	000 000 000 000 000 000 000 000 000 00
Notice Beneate	Rejehrlife	Dinajpue Dinajpue Jalpaiguri Uarjosing Tibes Cooch Behar	Nator Naugaon Lalpur Manda Baindelpur Churuman Raigaul Dunsipur Baloorghat Takurgaon Setabyoni Jalpapuri Aliporo Dun Talleoota Debigani Bhagatpur (Nagrakatta) Hana Siliguri Darjeoling Kaimpon Kaimopon Karacong Pedonp Yatung Dinhatta Cocch Behar Mickligani Mathabhauga Fulbaria	2 Bs 2 75 0 287 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 0 210 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SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF MAY 1898.

THE chief features of the weather during May were-

(1) Pressure oscillated considerably during the month, especially in the first-half, when the oscillations were of considerable amplitude, while in the latter half the daily changes were generally small. The average pressure was slightly below the normal everywhere, the

defect nowhere exceeding yeth of an inch.

(2) Temperature, which was generally high at the beginning of the month, fell steadily during the earlier part of May: subsequent changes were irregular, though the readings were as a rule above the normal till the end of the month, when owing to a further considerable fall there was a general defect.

The highest maximum temperatures were 113.7 in Chota Nagpur, 113.5 in Bihar, and 112.3 in Lower Bongal.

(8) Rainfall was generally below the normal except in Bihar. Defect was, however, small in Bengal Proper, but considerable in Orissa and Chota Nagpur. At no station was the total rainfall great, the highest being Jessore with 1471 inches, while Dhubri gave 1819, Cooch Bihar 1273, Sibsagar II 09, and Mymensingh, Noakhali and Comilla between 10 and 11 inches.

(4) Weather was distinguished by the unusual uniformity of distribution of pressure over the Bay and the marked absence of stormy weather. There was no early advance of the monsoon current which usually characterises the month, and the only disturbance recorded was a small depression which formed off Diamond Island on the 6th of May and passed northwards into Burma, causing general, though not heavy, rain in Burma and affecting also parts of East and North Bengul.

Showery weather prevailed over the province, except during the middle portion of the month, when the prevalence of westerly winds in Bihar and the west of Bengal caused a period of steady fine weather. Puring the latter part of the month, however, more normal winds prevailed, and local north-westers, which, owing to adverse conditions had been compa-

winds prevaled, and local north-westers, which, owing to adverse conditions had been comparatively rare in the earlier part of the season, increased in number and intensity.

At the beginning of the month pressure was very uniform over the Bay, and winds were south to south-east over the province. Temperature was high throughout, excess amounting to as much as 7° in the northern provinces, while ordinary hot-weather conditions prevailed. On the 2nd there was a moderate fall of pressure throughout; but as the fall was greatest in the north-west of the province, gradients become steeper over Bengal in the northern districts. On the 3rd conditions remained practically unaltered, and though temperature now began to fall at western stations, there was a large excess over the normal. Over the Bay, no indications of possible disturbance were apparent although the temporature now began to fall at western stations, there was a large excess over the normal. Over the Bay no indications of possible disturbance were apparent, although the wind changed round at Diamond Island to the north-east. Temperature continued to fall during the next two days, and rainfall became slightly more general. The north-easterly winds which had continued steadily at the Burma stations began to increase in strength, and this, taken in conjunction with the rapidly falling barometer in that region, seemed to point to the probable fermation of a local disturbance. These conditions led to the development on the 6th of a cyclonic storm of considerable severity, the force of the wind at Dismond Island, rising to 30 miles are how. The storm moved in a northerly the wind at Diamond Island rising to 30 miles an hour. The storm moved in a northerly direction and finally crossed the Burma coast to the south of Akyah on the 7th. A moderate amount of rain accompanied its transit into Burms on that day, and heavier falls followed in its wake on the two subsequent days, its influence making itself felt as far as North and East Bongal; and though the actual depression filled up very quickly, its effects did not entirely disappear till the 11th of the month.

Among other effects due to the disturbance may be noted a general fall of temperature which extended to almost all parts of the province, and which continued till about the 12th of the month, on which date we find that the mean temperature had at last been

reduced to a level approximately to the normal.

From this date, however, a change came over the conditions hitherto prevailing. Pressure rose over the whole area on the 13th. The character of the rise, diminishing as it did from the north-west towards the south-east, was such as to bring about a remarkably oven did from the north-west towards the south-east, was such as to bring about a remarkably oven distribution over the whole of the Bay, the difference between the pressure in the south of the Bay and that over the land area of Bengal being unusually small. The area of relatively lowest pressure was by this redistribution pushed gradually to the north, and the consequent offect was the ushering in of dry west winds, and the gradual introduction of fine hot weather into the province. These conditions were fully formed by the 14th or 15th of the month, and with the easy gradients and consequently light winds prevailing, weather assumed a settled character. Temperature naturally increased during this period, and though night temperature diminished to a slight extent in Bengal at the first advance of the dry west wind, the upward tendency soon affected them as well, excess reaching ultimately some 3° in their case, while for day temperature it amounted to as much as 10.

Local storms disappeared almost entirely under those adverse conditions, while rain was practically contined to Burmu. During this period of fine weather there were frequent oscillations of pressure, but the range was exceedingly small. The distribution, however, anderwent a gradual change, and from running almost due east and wost, the isobars gradually began to take a direction more normal to this period of the year, i.e., from southwest to north-east. Extremely light gradients, however, still prevailed, and the line of relatively lowest pressure practically encircled the whole of the province, thus giving continued existence to the westerly winds in Bihar.

From the 23rd, however, the gradients began to become steeper owing to rising pressure in the south, and the area of lowest pressure being thus gradually forced westward, the ordinary winds of this season i.e., south-east to east, began to set in. Pressure continued to rise steadily but irregularly up to the 23th, gradients becoming part passes steeper throughout the province, and this with the unevenness of the distribution gave rise to strong local winds. The excess above the normal on the 27th varied from 86 to 164 thousands of an inch. During the latter portion of the month local storms were, owing to the favourable an inch. During the latter portion of the month local storms were, owing to the favourable conditions obtaining, extremely prevalent, and partock for the most part of the true character

A steady fall of temperature naturally accompanied the other conditions of this latter period, and on the 27th readings were almost everywhere in considerable defect. On the 28th then the conditions of pressure were high pressure everywhere with steep gradients over the inen the conditions of pressure were high pressure overywhere with steep gradients over the province, and a uniform distribution, which had been maintained throughout, over the Bay. On the 29th a complete change set it. Pressure collapsed over the whole area, but by amounts diminishing from north to south, so that the distribution became more uniform over the province than it was before. A further fall on the next day re-established the previous inclinations, and a small rise on the 31st left the gradients as before with, however, a general pressure approaching as closely as possible to the normal. Considerable rain fell during the last three days of the month, and temperature was in considerable defect at the

It will thus be seen that the month divides itself naturally into three periods of almost It will thus be seen that the month divides itself naturally into three periods of almost equal length. During the first there was a general fall of pressure; winds were easterly in direction, and showers were fairly prevalent, while temperature which had been in large excess at the beginning fell. During the second period after a small initial rise, pressure changes were slight; winds were westerly; fine hot weather provailed, and there was an almost complete absence of local storms. During the third period the barometer rose steadily till within a few days before the end of the month. Winds again became easterly, and temperature fell steadily, while local storms grew more numerous and intense.

within a few days before the end of the month. Winds again became easterly, and temperature fell steadily, while local storms grew more numerous and intense.

Pressure changed rapidly at the beginning and the end of the month. In both cases the change was a full. After the disturbance on the 6th and 7th pressure rose moderately, and during the period of fine weather in the middle of the month, it remained practically steady, while during the third period it rose continuously up to the 29th, when the fall mentioned above took place. On the whole average pressure for the month was below the

mentioned above took place. On the whole average pressure for the month was below the normal at all stations.

Temperature fell during the first and third periods and rose during the second. At the beginning of the month it was excessive except at one or two stations, the greatest excess being in the north of the province, and amounting to over 11 degrees at Bhagalpur. At the end of the month, on the other hand, there was general defect except in Burma, whence slightly excess readings were reported. The greatest defect was in the north-west, the temperature in North Bihar being generally over 10° below the normal. Average mean temperature for the month was, however, in excess at all stations except Motihari and Sibangar, where there was a deficiency in each case of less than 1°.

The variation in mean temperature was due to high day rather than night temperature, methe average of the latter was in considerable excess only in Chota Nagpur and was actually in defect over Bihar and parts of North Bengol.

Rainfull has on the whole not been much below the average, while in the case of Bihar there has been actual excess by '001 inch. In Bast Bengal it has averaged about 80 per cent, while in North and South-West Bengal it amounts to nearly 90 per cent. In Orissa and Chota Nagpur, however, the rainfull has been considerably below the average, being nearly \(\frac{1}{2} \) in the former and \(\frac{2}{2} \) in the latter district.

The following table gives full data for comparison of the actual and normal rainfall of the month of May for all districts of the province. The figures are derived from the average and actual rainfall of the rain-reporting stations in each district, due allowance being made for the area which each station represents. This gives a more accurate average than the arithmetical means given in the monthly tables. The first column gives the normal or average district rainfall as determined from the observations of the post 25 years. The

arithmetical means given in the monthly tables. The first column gives the normal or average district rainfall as determined from the observations of the past 25 years. The second column gives the actual district rainfall as determined from the weighted actual rainfall of the month at the reporting stations in each district. The third column expresses the ratio of the actual district rainfall of the past month to the normal rainfall as a percentage. The fourth column gives the same information as the third in a slightly different age. age. The fourth column gives the same information as the third in a slightly different from

stating as a percentage how much the district rainfall of the month varied in excess or defect from the normal:—

Percentage Table for May 1898.

					district	district for	normal to	de Joseph
Diatelon.		Dieri	uct.		Normal rainfall May.	Actual dial	Percentage of activation of anything	Percentate er-
*6]	-	1	
	6	Burdwan	***	***	5:01	2.85	58	- 44
	Ĺ	Birbhum	545	***	4.03	4.63	112	+ 18
	- 1	Bankura	144	411	4.79	2.24	47	69
	- 1	Midnapore		4++	5:13	2.63	49	61
	- 1	Hooghly	141	+11	6.33	7.36	188	+ 88
South-West Ben	not I	Howrah	2+4		6:65	2.48	1 45	- 65
South-At car men	Rur J	24-Parganas	44+	+41	5. 8	4.61	80	- 20
	Į.	Calentia	424	641	6 43	4.08	76	7 28
	- [Nadia	191	117	6:48 5:07	5 52	119	+ 13
		Murshidabad	***	100	7:110	10.92		+ 9
	ŀ	Јавного	181	DE			149	+ 49
	- 1	Khulna	-4-		6:49	9°50 6°39	146	+ 46
	- 1	Rajshahi	PR 6	9++	7-41	8-88 0.98	104	+ 4
	- 1	[hinajpur	NI	141	13:14	13:04	9 i 99	- 7
		Jalpaguri	44-	411	8:24	6.56		- 1
North Bengal		Darjeoling	***	215	14 48	12.84	76 89	24
MOLPH TremPay	10.4	Cooch Behar	111	981	10.01	6.67	63	11
	- 1	Rangpur	***	941	7.48	B-61	308	- 87
	1	Bogra	***		7.75	6:68	86	+ 6
	- (Pabne	171	*A*	9.67	8.87	99	= 1 to
	l	Daces	411	10.1	11.11		03	
	- 1	Mymensingh	404	*** [8.67	8:67	101	÷ 1
	- (Faridpur	**1	4	7.96	9.42	118	+ 10
East Bengal		Backergunge	465	141	10.65	0.36	i	
Ditter waterflow		Tippera	4.04	64.6	10-48	10.03	95	- 6
	- 1	Noakhali	1 l) h	***	10.84	4.70	43	67
	- 1	Chittagong Hills	Tracta	417	11-38	8.25	29	- 71
	- 3			414	2-04	1.05	51	- 49
	- 1	Patna Commo	444	D+ 1	1.36	0.12	9	91
		Gaya	101	411	1.09	0.17	18	84
		Shallahad	0.0	144	1-75	0 11		
	i	Saran	141	41+	2.82	8.65	126	+ 26
		Champaran	p.o.s.	***	2.24	8.83	171	+ 73
Bihar	40.0	Musaffarpur	2-0.0	#41	2.66	4'27	161	+ 61
Talerer)	Darbhanga	***	114	2-53	9-81	108	+ 8
		Mongleyr	044	++=	8-38			411
		Bhagalpur	11+17	4 94	6.29		***	*14
		Purnea	8.94	444	4.30	4.28	99	1
		Malda	***	+ * *	3.71	1-97	58	- 47
		Southal Pargana		***	4.84	278	68	- 42
- 1		Cuttack Balasore	291	949	5.45			
Orises	111		###	P# h	3.28	101	h1+	*17
		l l'uri	649	894	2:45	0.28	9	- 91
		Hazaribagh	944	4111	2-17	0.56	20	- 74
		j Lohardaga Palaman	414	441	1.19	0-16	14	BE
Chota Nagpur	411.5	Manthum	411	HI	3.81	114		,
			449	411	8.83	2.61	68	24
		Singhbham	+8.0	4.43	n 00	2 91	00	

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the Province for the month of May 1898:—

			- 1		76	***	ATTRI					E.	AIWPA:	LE.			_
				month.	month.		range f		th above	0	f mont	h.	Beti	ny 443	\$,	Since May 1	10 à Lion.
Marronouses Divisions,				Authoritoberred daring	Lowest observed during	gheet of		Of meen for each day.	distance mean of month or below normal mean of	Average.	Marmal average.	Variation.	Average number in number	Normal average num- ber in month.	Verlation.	Average.	Normal stemps
epth-West Bengal		-	200	112'8	66.3	8918	78'8	891	+21	5 01	5'73	-071	6:38	7'54	-1701	\$161	
forth Rougal	111	441	100	106'0	66.7	9813	7814	69.0	+14	8117	9'85	1-1-08	10.03	10:18	-010	3.03	
Bank is in	_	10-7	1	102'A	6519	92'7	75'7	84%	+1'8	8114	10-16	78-103	ภาธ	1072	137		ļ .
Jihar 🕳 👑	941	101	144	113.6	6813	10178	70'8	887	+12	273	872	+0 01	4'85	8167	+0.48	i	
)rome on our	-	791	PP3	100·F	6715	UB'3	B-Off	8716	+1*0	3163	4196	-116	6180	518	0-88	7.29	1
Steta Nagpur	-	441	-	112.7*	67'8	703-7-	77.65	9015"	+3.84	1'31	2.78	-1'49	2.70	1-08	1 95	0'09	11
Luonon in m	min	848	P41	100-1	08.1	892	7816	80-h	+19			į					

METEOROLOGICAL OFFICE, BENCAL, The 14th June 1898. O. W. Kue Hler,

Offg. Meteorological Reporter to the Gett. of B. ngal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 5th to 11th June 1898.

				A.A.			Tampre	ATURE.			H	FOROKUTA	ī.	other.
Mont	(L	Des	(0)	Premure at 10 A.M. corrected and reduced to 52° Pakr.	Dally mean,	Maximum	Rages	Hinimum	Dry bulb at 10	Wet bulb at 10	Vapour tonsion at 10 a.a.	Dew point at	Humidity at 10	Rainfall, gant 24 hours.
1898.			٠.	Inches.	0	0		٠	÷	a	Inches,	4	1 %	Inohan
(en er er er er	444 444 444 444 444 444	5th 6th 7th 8th 9th 10th 11th	114 114 117 117 117 117 117	29 d06 1 538 1 600 1 628 1 614 1 591 2 482	87.7 87.4 84.2 87.0 83.2 85.6 87.6	97.5 92.6 91.0 94.2 90.3 91.2 96.8	19·7 10·2 19·7 14·4 10·3 11·4 16·5	77.8 82.8 77.3 79.6 80.0 79.8 79.8	88-6 92-4 87-1 89-6 87-6 88-1 89-0	81·5 85·0 82·3 83·8 81·5 88·3	1981 1·104 1·026 1·003 1·097 1989 1·060	78-7 82-2 80-0 79-9 82-1 78-9 81-1	73 72 80 72 88 74 76	0'82
	T	10 TM	an :	10 д.м.	pressu	re of th	19 59761	n daya	***				inches. 29.601	
				tempere 16 varia 14m ten			ven da;		496 +94 444		0 8 5 10 8 5 5 + 1	***	86·4 20·2 97·5	
	Th	e me	an l	10 а.м.	relativ	e humi	dity of	the se	ven da	ya.	094	***	%	
	Th	ne tot	al fa	all of re	in from	n 5th t	o 11th	June 1	.898		***	100	1 nelses.	

The daily mean temperatures are the crude means of maximum and minimum temperatures.

METEOROLOGICAL OPPIOR, BERGAL,

G. W. KUCHLER,

The 18th June 1898.

Offg. Meteorological Reporter to the Goet, of Bengal.

April 1898,
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File! Statistics of the Districts

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H. J. DYBON, Surgeon-Major, F.B.C.S., Sanitary Commissioner for Bengal.

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DIETHS.	- ED(1	11 14g oitasi (14d 17 dog 19 (14d 17 dog 19 (14d 17 dog 19		というないのできないというないないないできない。 のなりない ちょうしょう かんしょう はんしょう はんしょく はんしん はんしん はんしん はんしん はんしん はんしん はんしん はんし	1632	\$ 1.9¢		19.0-
	-0.3	Karatan X	•	· 医罗西哥斯特索斯 医马克姆多种特别的 1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至1000年至10	95 P.	4,304	<u></u>	1.070
ilar a	ape o	Рорићскои селе,	-	はないできませるのは ないでは、 ないでは、 ないでは、 ないできませる。 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 ないでは、 はいでは、	3,893,845	:		100.001
	No.		60	Michagora B. Pardyana B. Pargal and Chinema B. Parnagora Manikala B. Scath Maria bala B. Scath Maria bala	Total of all fowns with a population of se,000 and	Armage of the corps.	Pions dre years.	
	Distractors.		~	Rowral Colorate Nadia Marchael Colorate Nadia Marchael Ma		4	A	

The List June 1898.

Supplementary Vital Statistics of District for March 1898, received too late for publication with the figures of that month on the 20th May 1898.

AVERAGE OF CORRES- SPORDING MOSTE	PIVE VEARS.	antimited or \$4,000 moltafing or to contract to contra	ST.	35.04		1	1	
AVBEAGE	17.17 17.17	Moraber recta-	2	2,690	178,834	!		
{	P ALE	Batto per t.000 moistinger to morations per annum.	10	37.68	20-03	30-18	1	2
	TOTAL OF ALL CAUSINA	- steet regine .	100 p	12979	159,843	178,854		-25,661
	A URBE.	Matic per 1,000 of population of population.	11	244	24.2	The Ho		1
	OTEXE CAURE	Yumber regita-	16	353	96.109	12		-3,176
	(garda,	Ratio per 1,000 to population per annum,	18	- 54	10.	4		+.78
	[Jan	-sher regis-	2		ŀ			+191
DEATES.	TET AND	net population to make the second to the sec	2	þ	1	19		Bqual
DR	DISTRIBET AND DIABELIGES.	Mamber regist-	45	1		879'8		188 T
-		Matte per 1,000 ed population per annum	п	90.00		201.04		-9-14
	PAVAR	-sigos radaruN "beret	92	0.0 8		159,44		-15,638
	zi o	Latio per 1,000 of population per sanaum.		9	3	, j		67.+
	SEALLFOR	Street.		ı		12.20		+317
	STA.	000,1 mg oitals nottabuged to per nonting.	Į.		+	3.76 9.76		-1-69
	CHOLDEA.	Almber regia-			ß	Petr'st.		194, 9—
H8.		Reado per 1,000 of population por mentam.	15		45.44	24.82		-6.59
BISTES.		Number registered,	*		7,440	241,884		80,416
	Towns In Close	under restates tion,	-		2,944,05.8	71,009,017		I
	F	Districts	•		Ponnts	Total for the whole Province Avange of corresponding months of pervious five years.		Difference + or
		Division			Shegulput			

H J. DYSON, Surgeon-Major, F.B.C.S., Sanitary Commissioner for Bengal.

OFFICE OF SANITARY CONCESSIONER FOR BENGAL,

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 4th June 1898, as compared with the corresponding week of the previous year.

NATURE	F CARRO.			edies eather u Juni 1688.	акт, гид	WEEK EN	DIEG BATTEL TH JURE 1807.	AV, THE
			Number of boats,	Weight of	Tollage.	Number of bours.	Weight of cargo.	Tolinge,
			No.	Mds.	Re.	No.	Mds.	Ra.
Rice and paddy Jute Firewood Juher articles	8 e* 0 E a + b s	****	96 8 72 368	28,786 10,745 76,160 1,02,795	924 160 1,188 1,406	196 16 63 693	45,184 7,900 45,805 1,83,505	548 112 679 2,463
	Toral .	184	614	2,12,475	3,078	808	2,81,904	3,799

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 11th June 1898, as compared with the corresponding week of the previous year.

Natura	OF CARGO.		WHEE N	UTH JUNE 15	DAY. THE	WEEK 2	nding Saturi 1270 Junk 189	AT, TUE
	·		Number of boats,	Weight of cargo.	Tollage.	Number of	Weight of	Tollage,
Rice and paddy			No.	Mds.	Rs.	No.	Mds.	Ra,
Jute Firewood Other articles	494 481 594 864	##n	158 11 21 464	20,480 4,625 13,000 1,67,225	356 77 199 2,184	211 25 92 666	75,155 14,225 78,500 2,80,160	1,223 281 1,200 8,887
	Total		664	1,95,330	2,716	994	8,58,030	6,044

EAST INDIAN RAILWAY.

Statement of Goods Traffic in staples carried during the four weeks anding 23rd April 1808, as compared with the same period of 1897.

	189	7.	180	8.	Ische	YOR.	DECR	FAS2,
HTAPPAN.	Weight.	Preight.	Weight.	Freight.	Weight.	Freight,	Weight,	Preside.
1	Mdn.	Es.	M da.	Rн,	Mide,	P6.	M ds.	Ba,
Coal & Coke carried for the public and foreign railways	75,45,479 1,98,592	8,93,441 89,023	77,90,148 87,250	10,47,499 51,778	2,43,669	1,64,068	41,312	27.845
Cotton, manufacturedon 1.— Twint a Yarn, Rumpoan 2.— Ditu, Indian 5.— Pierr-goods—Rumpoan 4.— Ditto — Indian	8,414 8K543 1,71,145 \$1,089	6,570 13,353 1.74,490 10,650	5,120 25,050 2,14,909 20,182	5,929 10,833 2,84,816 11,173	92,963	40,710 514	365 3,199	1,x(t) X,231
Drugs and Chemicals- 1.— Interioring, other than opins 2.—Non-interioring	300 10,998	270 8,730	240 10,905	171 7,461		424	57 701	165
Dyes and Tans- 1.—Indign	1,050 11,700 3,615 11,708 114 2,983	871 2,903 1,03,1 6,304 190 1,330	821 17,342 1,840 17,470 208 0,861	861 4,339 866 13,6,0 384 2,062	6,436 (6,16) 103 2,678	1,926 8,907 294 718	1,756	513 286
Grain and Pulse— 1.—Wheat 2.—Rive in the bunk 3.—Etter not in the lank 4.—Jower and bujes 5.—Others	3,66,940 1,84,946 14,00,004 6,606 4,16,745 1,12,004	01,999 82,038 4,92,048 936 1,15,200 19,575	10,13,559 10,127 7,20,000 15,293 9,49,703 00,078	3,09,689 7,836 1,94,335 1,845 84,043 14,78)	0,50,018 9.187	2,10,700 809	90,807 7,70,600 1,84,002 66,616	\$6,147 8,65,86 25,166 4,786
Hules and Skins - 1.—Hides of active	80,258 14,185 1,885	55,702 5,065 867	53.824 13,025 3,001	36,714 6,540 101	764	1,525	96,440 1,760	14, 46 50
Jate- 1.—Raw 2.—Gunny-bage and oloth	70,850 72,015	277,71 32,855	87,490 1,75,200	18,402 94,655	17,840 95,188	750 61,700	::	-
Legentiek	20,192 26,385 6,230	8,1118 20,105 4,761	24,534 18,834 5,970	5,002 14,057 6,760	7,036	 "1,01s	6,858 6,131	18a 5.54t
Liquers— 1.—Heer	13,001 1,994 2,551	4,125 2,550 3,927	0,187 1,172 2,014	3,542 1,7-5 4,168	*** 32	172	7,774 722	54 28
Matela- 1. Copper unwrought 2. Brack ditto 3. Copper wrought 5. Copper wrought 5. From ditto 5. From ditto 7. Zinc & Spelter	624 1,056 1,05,510 15,149 18,149 2,149	671 502 1,454 7,044 56,601 11,020	400 1,955 1,860 10,-95 1,45,68 0,247 2,053	496 1,518 858 7,396 45,216 7,385 1,471	1,892 1,892 1,892	951 351	\$25 194 18,582	50 11.48 5,53
Old- 1Kermine	91,681 8,303 6,519 10,734	88,901 1,008 2,94 3,500	96,632 3,643 3,157 18,864	24,0%/ 1,034 1,634 5,827	375 3,813	1,067	4,440 EL762	2.577 6 3.39
Dil-sesde- 1.— Linneed 2.— Raja and musterd 3.— Tu or papit 4.— Foppy 5.— Entrinuta 6.— Contor 7.— Others 6.— Orugan 6.—	2,35,223 0,51,390 12,056 7_,970 1,35,459 1,01 18,800	61,608 1,40,633 1,311 20,148 50,150 83 10,248	6,30,743 7,10,054 23, 6d 50,357 83,507 27,257 87,452	1,82,470 2,10,406 4,807 9,523 23,178 1 8,022	\$,00,760 \$8,005 10,307 \$6 \$7,006 0,185	70,868 68,633 2,876 27	84,743 44,691	10,60
Paper and pasteboard	16,774	7,758	17,858	188,4	1,684	1,146		
Provisions— L.—tince E.—Dried traits and mata S.—Cthers L.—Potatoos	32,510 8,149 62,897 64,194	18,817 6,843 26,496 13,620	38,404 11,209 50,498 82,053	20,338 0.050 25,135 14,418	5,494 3,06)	1 147	1,809	91
Bailscay plant & rolling.stock carried for the public & foreign nathrapes. 1.—Loremative engines & tendors & parts bleaved. 2.—Corribues & tracks & parts thereof. 3.—Receival & ish-plastes. 4.—Respons & keys of steel & mat from 5.—Other sorts.	2,403 1,47,292 7 5,29,271	56,482 72,463	3,830 3,421 35,910 1,02,485	750 906 7,129	1,400 428	750 406	2,95,510	g g
Sattpates, do,-	67.868	86,335	8,74,350	71,148		200	5,034	l .
S.— Other saline substances	20,680	84,828 9,600	52,540 57,529	23,575		24		1 1
## - Indian	1,868	734 24 471	1,720				36	

	STA.	rida.				ļ	807.	11	SDH.	INCH	TARK.	Dres	MARR.
						Weight.	Preight	Woight.	Protght.	Weight.	Preight.	Weight.	Freigi
						Mds.	Re.	Mdu.	Pa,	Mds.	Re.	Mf In	Ha.
1 - Kerel-muta	144	41.	411		74	18,612	15.172	18,005					
a _Penper					_	41 97.0-	2.840		12,108	4		607	
3 - Gluger an			- 11		100		963		8,225	814	BTG .		9,
-Children	174	114		884		4515 15 4	22,798	-1m:6	63.5	714		107	Per
5 - Carstanious		100		44.	45		1,146		27,001	6,150	4,203	235	
g - ()cherry			481			9	572		721	971			104
d'-cataman in					-41	4 I militar	012	1,718	6t1 i	261	101	ma .	
water and bons						4,43,227	20.05+	4.0	1	801		100	
Miny Plus nime -1.						10,200,000	30,985	4,85,720	66,218		5,6a3 ·		
											6,083	14,007	
1.—Refined			461			10,756			1				
1.—Untermed	141	***				0	9,598		6,384	1,503	2.000		
1-Pathbitmon	101			11.5		0,14,500	63,785	4,17,580	81,030	45,665	1,704	***	h d m
										-HILLOND	15,885	*4+	110
1 Poreign	- 94	pp.											
s Indian		Ph-			- 11	2 189	111	11	140				
	177		112	100	1.91	2,46,790	1,223	1,499	1,049	-94		1	
क्रिकेट मार्कित	***	111	110	110			65,077	1,78,310	\$7,150	40	- 1	787	
delibera		**11	144	-1-		1,385,761	69,47H	67,316	30,309	444	194	67,4R0	10.
iges, raw	***	***	- P P	110	861	3,046	1.895	1,946	1,0553	+4+		71,667	82.
	_								-1000			708	,
oil, manufactured	12mm	12/2/07/20				non I							
1, - Pappe-guodu.	(zela	INCHE III	h 8	149		363	423	201	240				
\$- H			1	***	***	2,667	3,500	1,235	2,30(1	-11		111	
3.—Shawle	FIF	-41		++-	ma .	144	4re		-70-1			653	1
		. no seed a							441	a des			
other articles of a									1				
L-Pleyrood	160	4-4	4.6 1	417		13,875	1,042	20,790	1,287			1	
z hadger sized		441		4		68,474	20,480	9,576	1,581	7.223	945		
3 Howell flower		8.07	r-1	8.15	114	17,150	2,404	32,633	6,4%	***	411	898,50	17,1
4 Od-cake		min .	1 = 5	641	nder	17.279	14,021	02,314	18,540	15,446	3,926	.,	
1 Paints & color			see al.	***		19,461	2,124	15,001	4,654	P1.1	648	14,864	
8Seeds other \$1		a pro-extr		P MI		67,391	30,137	88,443	29.385	49.4	8,810	4,082	
T Wooden artic	190	160		160		16,393	8,430	19,417		411	_	4,14621	
8,-Ulbery	ek I	411	delar	-84	dur i	7,75,450 ;	2,63,849	9,63,860	5,046 0 Hz 000	121	566	3,970	
								4,44,400	2,86,983	1,00,840	26,737	7010	240
							i					-0.0	***
			1	[otel		1,57,48,657	34,26,65 }	1,67,83,572	94 411 911				
					- 1			Healthounty	34,48,681		22,227	15,076	
	-1		111	+		15,750	21,523	24,956	90.000				1.6
		191	101	4,-	711	6, 47, 1184	35,974	11,28,44	20,803	18.485	9,980		
		41	11-		- 111	1 L, \$5, 40b	40.R92		84,874	6,48,570	66,000		941
e-stock	.,		h	**4	171		11,000	7,60,061	50,384	441	6,900	3.63,347	***
					7.		I I THOUGH	lee .	10,032	974		211	4
			T	'otal	1.4	1,75,36,928	88,45,061	2 7d at 200				***	-
						, -,,	INTERNATION	1,76,41,862	38,24,212	1.04,433	89,942	514	410

C. W. CLARKE, Assistant Auditor.

THAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, the 7th June 1898.

EASTERN BENGAL STATE BAILWAY.

Abstract of principal Communities carried over the Eastern Benyal State Railway during the month of Murch 1898, as compared such the same month of the precious year.

						1999	i,	100	7.	Tot	ul,		
	BTAP	LEG.				Up.	Down	Up.	Down.	1898.	1897,	Increase,	Distribute.
						Tons.	Tonu.	Tons.	Tons.	Tons,	Tons.	Tour	
			-	h hd					7,701	24,003	16,669		Total,
Goal and Cake Foreign Bally Cotton, raw	rnys.		160 [71]		***	19,034	19,609 688	8,876 	091	G65	610	7,936	4-1449
Cotton, manufact Twint pod ya	nered -	aposti.		.41		234	113.17	81/2	HMIN	204	503	803140	Pel
Piece-goods, Date,	I FIGURE	opeas	a dia	440	122	1,06% 1,06%	178 4 11	2,035 41	186 71 23	49U 2,0%T 86	9 r) 9,100 66	1 199	12
Drugs and Chemic Interjeating,	on In-					14	16	16	25	25	41		13
Non-intoxicat	ing-						12.744	.41 41	******	,,-Mr			
Others Dyes and Texts—		***		*11*	p. 11	.84	401 + 10	309	1	84	300		236
Myrabolana	111	- 1	111	er-	**	21	1411-MA	ŠA.	direction B	21	30	- 1-	* h
Cutch Turnerle				511	717	21 6	400	3A 10	180	406	130	276	1
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Others Grain and pulses				40.1					16	26	5.7		
Wheat Rice in the l	en ilk	111	144	461	"	26 2,1%7	6,880	3.783	3,045	9,807	6,830 7,430	1.077	1164
Rice not in the	ne huik	4F4	148	100		7,100	8,54/8	8,944	265	Palik Palik	7,530	1,909	
Gram and pu	LNO	101	-41	-31	#1	2,021 703	6,843 286	1,117 88	10,653	8,904 989	11,769 85	841	1,78
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Bides of cattle	HIDE	hate	144	-40	"	}							
Baw Bkins of sheep,	80		***			60	1,610	1.9	240	1,679	759	2,0	
Divessed or to	en infact	***	44-	***	101	2	5	h-y +88	4	8	4	4	
Jaio-					i					BD 0554	20.240		}
Gunny-bags	and slo	Jh	***	6-q-d -+-	7**	313 934	83,158	502	1,041	35,274 1,648	20,018 2,233	18,006	- 66
Lac- Stick	4 149				}	}	152		35	129	25	67	
Shell Leather, manufi		***	***			34	2	. 20		54	31.	8	
Liquors— Reer se		qu.	441	111	411	43	Mira	99	8	43	31	35	
Britrits		121	961	***		Shir	P\$1.1.	76	4****	90	74	16	21-1s1
Metals -	. economista	Till to	171	173	4-4	1 rekr	1,,,,,,		845411				p.14 ppr
Enpper, unv Bruss, d	illo		+4.		111	19		2 3	11100	15	7 3	6 6	p=144
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Others		10.	***	64.6	Liv	334	108	3,281	ไข้	974	343	29	
Olls- Kerceine	que		44.	212		8,744	168	8,461	113	8,900	9,581	348	-
Caster	111	146	171	4** 741	Bre I	23 69	4411	4t PL	<u>1</u>	93 54	1 12		
Offices	444	**-			+-	200	39	250	3	224	232	WH-11	
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Opinta Paper and peate	board	944	100		801 800	198	245	" i45	303	825	307	38	
Provisions-						73	8	32		78	34	\ 45	
Detect frotte	and no		841 441	6 54 6 11	111	(81	618	1,00L	745	1,499	1,740	1	
Hallway plant	and re	Hoge-	tork	carried			441		******	411141	see L		
the Public an Locomotive peris for	d Forely 9, Euro renf.	gm Iteri	nd (ezidera	and		447 ***	*****	end or o	,			- part 100
Charlinges is	id truck	i had j	parla	thorse	f		Aut hite	4		884 FE4	· · · · ·	17	
Materials fitted raths keys of at	and fi	ւհ-թիւն շոցչ-նչ	es, sl	majkars,	und	902		345	27	805	264	25	E word
Other ports			PP1	bet d para		125 6,671	70	6,40\$	158	194 5,041	6,637		i
Salipetre, &c Salipetre Other salie		iances	***		gir Pa i	7	Mary na Mga 1	5	#1 7m1 max461	7	T HAPPANA	67k4++	100
Pornign			494		441		21		17		37	Miles	, .

SUPPLEMENT TO THE CALCUTTA GAZETTE, JUNE 15, 1893.

1249

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							σ _р .	Down,	Up.	Dagu	1698,	1897.	Increase,	Degran
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Charles		***	441	mint.			450	199	218	10a	199	112	18 87	Titled in case
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kustle L'other article	ui nif re	awdi	ess resultan		ese	ang	hb- 188	Press.	13 1	4=	1	13	1746	"11
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					tin!		65,603	00,141				a again, p	8,944	

OALGUETA, the 7th June 1898.

A. HYDR WOLLASTON, for Examiner of Accounts.

BENGAL CENTRAL RAILWAY COMPANY, LIMITED.

Abstract of principal Commodities carried over the Bengal Central Railway during the month of March 1898, as compared with the same month of the previous year.

				1896		1897,		Tora	1.50	Increase.	The
\$14233E			-	Up-	Down	Up.	Down.	1898.	1897.		Decrees,
				Tout.	Tonk	Tons.	Tona.	Tons. 3,561	Tons.	Tous,	Tong,
dand Coke carried for oreign Rallways.	the F	ablia	ma d	8,258	908	1,648	mp.141	4	******		Palpan
lon, raw	***	411	***	1.454P1		207	600.10	94	907	*****	113
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des and Skins- Lides of cattle-	п н	. 100)							
Rew	n ++	-	***) } perso	70	100111	60	30	50	20	
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be-		.,	411	CT CT	578	******	117	878 36	117	461	pers
Gunny-begs and cloth	41			777.789	£	25	100	100			
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Spirits		. ,	111	******	Arrival Van 188	4	*****	1		11-100	
Copper, unwrought			114	,	mhriqu	H11 100	10155	411441	ALD VED	441100	-
Marana, Citto	111 7	ee rat	- 00-1	p4==61	Mercus March	194+14	#Pfe-r-	_{BG}			21.0
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Others on m		110 111		25	80	12	34	196			1
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SUPPLEMENT TO THE CALCUTTA GAZETTE, JUNE 15, 1898.

1251

STAPLES.	- 18	09,	18	97, *	Tor	Sili IS _e		
	Up.	Down.	Up.	Down.	1816.	1897.	Increase.	Detroue
	Tona.	Tons.	Tone,	Tong,	Tone,	Tons.	Tour,	Tons,
Pepper Beleinub Pepper Childe Childe Cardanous Children C	3 ************************************	38 38 15 8	\$ Property of the state of the	774 hm 60	689 40 17 40 24 783	776 ***********************************	01-1004 0-100- 01-100- 11-101 0-11-128 11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-11-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-15- 10-1	170 mean history describe history
Industry The property Communications The property of the pr	25	3	40	111111111111111111111111111111111111111	30	######################################	100011	**************************************
Manufactured - Cherri	1 1		83	23 	94 	1.08	721 11h	84 ******* 9
Pierogodo, European Ditio, Indian Sheria	336	162	1,877	948	606	2,385	mar hill mar hill mar hill	1,787
Total	5,915	4,619	5,R69	8,379	10,484	9,348	4,448	B, 2/92

CALCUTTA, the 7th June 1898.

T. Siddle,

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for weak ended 28th May 1898 on 1,705 09 miles open.

	CDACEIN	O TRAFFIC.	NERCHANDIES TE	CAND MINURAL SPRIO,		1	THAPPIC	Tuals-sich
	Number of passengers.	Coaching products.	Wedght oursesses	Receipts.	Other earnings (estimated).	Total partings,		· -
	(4)	R1, A. P.	Mus. s.	R4. A. P.	Въ. а. р.	Ra. A. P.		
otal traffic for the work be per mule of rathway for provious 201 weeks of ball-	3/40/096	8,33,335 A 0 198 TO R	40,00,254 50	9,59,593 10 t) 557 8 0	91,040 0 e 12 8 6	18,06,973 n o 760 n g	90,000	170,740
3 80F.	8,967,340	78,64,004 5 6	8.97,78,972 0	1,75,77,398 8 0	6,51,714 0 0	2,53,63,178 8 9	(8) 1,807,6001	(6)
Total for \$14 weeks	7,217,435			1,80,07,980 18 0		2,08,10,149 A 0		3.31.76, 13mg
Оомужилион.								3,535,1901
atal for corresponding week of previous year or made of radway correspond-	510,116}	9,67,916 12 8	41,45,204 0	.6,75,123 2 0	82,710 £ 4	11,88,148 14 7	88,084	155,3.3
ing week of provious year; otal for corresponding 211	949-10	108 12 8	Pen add	512 13 ft	13 5 6	604 15 5	110 ma	2191av
weeks of pravious your	8,781,0651	U7,82.303 2 0	8,80,20,236 20	1,85,40,146 a a	4,70,007 , 7 11	2,07,67,617 2 2	1,928,883	3,284,29

(a) The increase is in outward traffic.

(b) Miles 4,700 added to concurre and 3,570 deducted from merchandise an account of difference between the approximate and audited figures in a maded 2nd 4 pull to 7th May 1895.

TARKESSUR BRANCH RAILWAY.

approximate Keturn of Traffle for week ended 28th May 1898 on 23:23 miles open.

	Coacitial	TRAFFIC.	MBEGITA SPISS		Other earnings	····	TBAFFIC	TRAIN-MILES HOL
	DansonRuck.	Conching geographs.	Weight carried,	Becoipts.	(estimated).	Total carbings.	Cosching.	Meroban- dire.
		Rat. a. P.	10 De. 8.	Es. A. P.	He. A. P.	Ru. 4. P.		
Or per mile of railway For pravious to; weeks of half- year,	90,074 \$40,390	4,820 0 0 217 4 1 1,41,516 0 0	28,561 10 8,41,615 0	516 7 0 94 7 19 13,749 4 0	10 0 0 0 7 2 192 0 0	8,394 0 0 242 3 1 1,58,430 4 0	1,107 99,452	81 : 2 8,830 II
Total for 21) weeks	180,194	1,46,340 0 0	8,53,510 10	14,283 11 0	309 O O	1,60,810 4 0	#8,64p	2,401 24
Companies Total for corresponding wook of previous year For mile of ruliway corresponding work of provious year Total for corresponding 213 weeks of previous year	20,720	4,976 14 2 223 14 1 1,54,185 1 3	17,805 2u	745) 0 85 8 3 18,961 14 0	6 11 0 0 4 10 152 7 B	5,718 10 9 257 11 3 1,451,803 0 0	1,066 21,548	148 4

DELHI-UMBALLA-KALKA BAILWAY.

Approximate Return of Traffic for week ended 25th May 1898 on 162'84 miles open.

	Солсина	- Tuabbic.		AND MINERAL PRIC.	Other earnings		TRAPPIO	TRACK-MILES OF
	Number of passengers.	Coaching receipts.	Weight curried,	Receipta,	(retimated).	Total sarnings.	Coaching.	Merchan-
Total traffic for the week Or per mile of milway for previous 20) weeks of half- your,	16,788 894,095 610,878	Ha. A. T. 14,910 15 0 90 5 9 44,29,891 6 0	Mps. s. 3,10,494 80 20,14,840 80	Ra. 4, P. 15,479 4 0 15 8 6 3,86,028 9 0	Rs. 4. P. 91 0 0 0 8 0 1,766 U 0	Re. A. r. 20,001 1 0 182 7 3 7,27,283 15 0	8,308 154,727	4,118 J 95,960 M
GOMPARISOT. GOMPARISOT. Total for corresponding week of previous year For mile of rallway corresponding week of previous year Total for corresponding 211 weeks of previous year	17,661 è	18,185 18 1 82 0 9 3,24,908 5 7	21,25,885 \$3 1,14,295 \$0 	19,527 21 0 65 9 8 2,83,902 15 11	63 7 0 6 4 1,86 8 9	7,56,658 ± 0 33,726 16 7 168 0 9	6,834	4,308 B

EASTERN BENGAL STATE RAILWAY.

(Includence N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Roturn of Traffic and Mileage for the week ended 28th May 1898 on 818 miles open.

	COACHE	FG THAPP	TG.		Muhonam	DEI II.	R AND MLI LPPEG.	1 30 1				-		_	· <u>·</u>	TRAPPIO	Tharm-Mis	
	Number of passengers.	Coach			Weightcarr	ied	Berei	pti		decluding	Phi E fe	Den Cry,	Total es	rei	Bjrt.	Coaching.		
	29E,100	Eq.					1			Ba.	á.	Р,	Rs.	á.	P.			1
ter the week of helf-	284	1,04,260	0	0	6,41,700 784		98,800	Đ	0	38,360 \$1			2,40,350 †976	0	0	84,900	\$1,440	64,600
- ** *** ***		21,67,288	_	1	1,77,93,283	-		9	0	8,00,919	0	0	84,32,711	0	0	673,057	fried days	
of fee 2) weeks	4,801,848	22,70,968	0	-	1,84,34,933	0	30,68,971	0	0	3,44,173	0	0	40,71,431	0	0	707,287	784,813	1,478,000
Statement belog				1														
my porrespond-	191,177	97,407	# 1	0	11,98,115	D	1,89,588	0	0	47,876	-	٠	1,64,986			85,796		
thy correspond-	285	180		1	1,672		171	0	0	46	Q:	0 3		0			B4,931	05,750
5007 an an an	4,261,103	23,25,885	0 0	a [1,65,08,104	0	25,19,720	0	0	3,20,493	a	0	40,75,897		1	710,888	Barries Made and	
			_	Ė	Andless									-	"	1 10 010	789,441	1,485,000

[&]quot; Audited up to 2nd April 1828, † Excluding steam-boat earnings,

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Benar Sections.)

Approximate Return of Traffic and Mileage for the week ended 4th June 1998 on 818 miles open.

	COACETH	o Trappi	c.	MERCHANI	Pa.	7 480 MII 19910.	(m)	LAB	Other on	rai	ng:	Total	ul		TRAFFIC	TRAIN-MIL	de kvy.
1	Number of passengers.	. Conobi		Weight carried.		Receip	oke.	,	(Inchia terry		ľ	Mirair	office	t.	Conching,	Merchan-	Total
		Re.	A. 2.	Mps,	6.	Ec.	٨.	2.	Ra,	٨,	P,	Ba.		. P.			
for the week of railway will weeks of half-	194,110 227	94,710 116	0 0	559,090		95,510 117		0	8,430	0		1,85,650			\$3,790	81,big	63.34
lot 25 weeks	4,809,241	23,61,073			_	80,78,080			3,46,430	0	0			0	Til.ese	709,469	1,671,14
Dilitor,			0 4	1,63,51,939	*	31,65,560	0	0	8,51,560	0	0	bs,94,403	0	0	743,950	790,631	1,534,40
responding period	204,786	99,083	D 0	7,69,080	0	1,18,700			7,100	4	Ð	3,31,868			-		
Person year	352		0 0	934	ņ	145	4	_		ó			0	1	23,063	88,900	46,87
	4,445,888	28,36,428	0 g	1,90,61,028	0	25,55,420	0	0	\$,37,691	0	0	**	D	1	748,690	767,300	1,500,040

Audited up to 18th April 1838, Birolading steamer carnings.

DACCA STATE BAILWAY.

Approximate Return of Traffic and Mileage for the week ended 28th May 1898 on 86 miles open.

		G TRAFFIG.	MERCHAND	BADDIG.	WHILE	Other on		Total	THAPPE	Talle-Mil	20 x 00
	Number of passengers,	Conching secupie.	Weight oarned,	Beor	ipta,		r attaggi.	earnings.	Coashing.	Merchan.	Total
Miles of half-year's the history	18,708 329 507,257 588,057	7,150 0 0 63 0 0 1,58,020 0 0	M 24, 20,410 237 767,121 7,87,831	0 1,670 0 25,416	0 p	80 3 4,007 4,177	4. 2. 0 0 0 0 0 0 0 0	2.00 0 0 10d 0 0 1,37,035 0 0 1 1,45,633 0 0	35,584 58,011	1,040 21,047 38,378	4,00; 07,10; 01,28;
mpuding week	18,210 148 441,803	5,888 0 0 76 0 0	41,966 488 6.96,306	0 30	0 0	4,266	0 0 8 0 0	1,005 0 0 1,07,185 0 0	3,500 -	1,969	8,70c

^{*} Andited up to had April 1808,

DACCA STATE BAILWAY.

Approximate Return of Traffic and Mileage for the week ended 4th June 1898 on 86 miles open

	COLURIE	TEAUF:	c.		MERCHANT		AND MIN	96.86	AL	Othe	,		Tota	J		TRAPPIC	Thirtie
	Number of passons, ors.	Conchi			Wolght parried.		Receip	ote.		BACTALE	ijo.		earn)n			Conobing.	Merchan dies
		B.s.	à,	P.	Mps.	0.	Ha.	J.	Р.	Ba.		₽,	Rs.	Δ,	z.		
otal traffic for the week	30,910 · 143	6,564 76			76,950 107	0	1,720 30		0	20	0	0	8,360 97			2,647	1,933
Ages, and an an and an an an and an	824,719	1,61,858	0	0	791,707	0	77,964	0	-	4,165	Ò	0	2,43,283	0	0	54,479	38,160
Total for 15 weeks	\$40,000	1,68,412	٥	o	808,717	0	78,986	0	9	4,945	0	0	8,51,613	0	0	67,156	40,503
COMPARISOF.																	
etal for corresponding week of provides year or male of railway correspond-	11,763	6,251	0	0	18,119	Q	1,801	g	0	46	0		7,798	Ð	0	1,555	1,977
ing week of previous year otal to corresponding date of	203	73	0	0	189	0	17	0	0	1	q	0	91	D	4	711	10
previous year	405,076	1,41,809	0	0	218,587	0	59,323	Ď	0	4,861	4	0	9,04,983	0	ø	80,990	17,63

^{*} Audited up to 18th April 1898,

BENGAL CENTRAL BAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week anded 28th May 1898 on 125 miles open.

•	COACETS	TRAFFI.	٥.		Marchand	TT	rio.	NIL		l						TRAPPI	C TRAING
	Number of passengers,	Coacht			Weight oarried.		Becel	pta.		Other ea	roto	ıgı.	Total ea	radi	oga.	Conching,	Mercinp dies.
		Bs	à.	p.	M.DA.	ß,	Re.	ă.	P.	Ra.	à.	P. 1	Ro.	٨.	P.		
otal traffic for the work for per mile of railway	\$0,757 245	12,323 99		0	43,470 548	0	3,496 26			10,169 81	0	0	25,862 208		0	0,880	1,086
10000 W	0,49,598	2,80,105	θ	Q:	19,03,628	0	65,247	Q	β	88,405	0	0	4,18,737	0	0	1,01,595	48.2%
Total for 11 weeks	6,90,385	3,92,428	0	0	13,47,208	0	88,728	d	0	,03,563	0	0	4,44,719	0	D	1,00,684	44,347
of all for corresponding week of previous year	31,670	15.968	0	0	64,215	0	4,969	0	0	165	0		17,397	0		5.113	2,85
ing week of previous year	989	98	٥	0	614	0	90	0	Q.	L	0	0	180	0	D		
bacogrades Name " " " " "	7,09,479	1,69,964	а	0	14,42,615	0	89,791	0	0	8,903			3,68,562	0	0	99,178	57,150

^{*} Audited up to 2nd April 1898,

EP2

BENGAL CENTRAL BAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week ended 4th June 1898 on 125 miles open.

	COVORTR	6 TBAPPI	Þ.	i	HREGRYNS	Te	AFFIG.	PR4	4		i				PRAPPIC	TRAIN-RIE
	Number of passing gars,	Donehl			Weight narried.	,	Kecemi	žI,		Other earning	1	- Tota		ļ.	floachto#-	Merchina- duse
		Ra.	A. P		Mpt.	ß.	Ra.	4. 1	r.	Re. a.v		Ra.	٨.	P.	1	
Total traffic for the week Or per fulle of rajlway For previous 21 weeks of half-	29,761 238	14,690 DD	0 (54,028 633			Q.	0	. 393 0 0 3 0 0		16,433, 131	0	0	5,213 .	2,9 13
Auen property of capital	088,993	2,02,590	0 ()	12,48,869	D	28G, FR	0	0	62,637 0 0	i	4,43,939	0	0	1,06,403	44,5"1
Fotal for \$5 weeks	113,764	2,94,778	6 (13,00,091	0	92,508	0	0 1	43,030 0 0		4,60,375	₹1	0	1,11,675	40,590
Companies.									i		ı					
Total for corresponding week, of previous year	\$4,575	19,871	0 0		65,678	Ų	ō,183	0	0]	85 0 0		17,729	0	0	4,046	. 9,596
tog week of previous year	277	101	0 (0	827	Ш	43	6	0			148	Û	0	qqdar-	164 161
or beening Appropriate many	744,056	3,83,439	0 (18,15,498	0	04,884	0	0 :	8,930 \0 0		5,86,391	q	0	80,138	39,707

· Audleed up to 16th April 1808,

ASSAM-BENGAL RAILWAY.

Approximate Return of Traffic for the week ended 28th May 1898 on 286 miles open.

	Содсини	TRAPPIO,	MERCUANDISE TRA	and Minesal Prio.	Other caredons		TRAFFIC	TRAIN-MIT	De Lun.
	Number of passengers,	Coaching receipta.	Weight extried,	Hecelpis.	(estimated).	Total carnings,	Conching.	Merchan- dies,	Company,
		Re, A. P.	Mina. 6.	Ва, д. р.	Re. A. P.	B4. A. P.			that Par
mile for the week	29.375 75"45	12,023 6 0 42,04	2,55,189 G 893:17	10,396 0 0 1 86'86	90s 0 0 8192	\$3,\$55 0 0 61.31	8,903 10'60	5,35G 18'7S	8,358 20-23
prints by weeks of haif-	541,631	5,26,570 0 0	47,93,389 0	1,73,277 0 0	13,085 0 0	A,11,930 0 0	49,446	91.740	154,204
field for its weeks	564,066	8,38,598 0 0	40,78,570 0	1,82,673 8 0	18,019 0 0	8,88,185 0 e	60,488	97,105	162,503
responding work of management of miles; corresponding work of the sorresponding date of	\$0,98 5 5813	30,600 0 0 30*40	\$,86,658 D 667'99	11,519 0 0	978 e q 2-72	23,206 0 0 65:2L	3,221 R-M	7,733	10,853
END TOTAL THE THE THE	437,853	9,49,741 0 0	87,47,858 0	1,56,016 0 0	10,657 6 0	6,46,416 # 0	75,3908	1,54,070	232,984

(a) Includes audited figures for week ending 23rd April 1938.

FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Assam-Bengal Railway.

	POR WERK 1 MAY 1808.		RECEIP	DE TOR WEEK	RVDING 7.	į.	267 A	CEIPIN P PRIL 189 MAY 189	8	10	AL RECEIPTE'S OF APRIL 1807 T 2008 MAY 1897.	BOX	Total	Total
·	Récolpta .		Mean mileage a orked,	Receipts.	Por mile worked,	Moan mileage wurked.	Total	receipts.		Mean mileage worked.	Total receipts.	Par mite worked por week.	increase in 1688,	Socrame i
	R6.	Rs.		Ra.	Re.			Ra,	Ra.		Ro.	Re.	Re.	
	13,255	91:31	\$60	28,108	65'#1	186	5	0,03,683		380	1,49,868		86,166	411788

ASSAM-BENGAL BAILWAY,

Approximate Return of Traffic for the Week ended 4th June 1898 on 286 miles open.

,	COACHIR	o Thappic.	TEA	AND MINERAL	Other earnings	Total carnings.	Тлавую	TRACE-MILE	ar,
(Number of philosophy [7]	Concluding receipts,	Weight carried.	Beccipts.	(setimated).	com cat units	Coaching,	Merchan- dise,	Total,
_		B4. A. P	. Мон. з.	Ba. A. P.	Ba. A. P.	Ba. A. P.			
the for the week sile of railway	51,479 70:08	18,647 0 0 64.23	2,57,510 D	10,100 6 6 85'81	267 O O	23,004 0 0 80:43	3,005 10'51	4,693	7,407 20181
Management of the last	546,186	8,39,095 0 0	49,90,119 0	1,82,96} 0 0	14,410 0 0	5,35,9A7 0 0	55,458	97,172	169,6;
Diel for 22 weeks	885,706	3,51,233 0 (52,57,039 U	1,03,061 0 0	14,667 6 0	5,58,061 0 u	69,463	101,881	170,587
strepording week of	10,434	9,800 0 0	1,74,795 e	10,080 0 o	836 G Q	20,128 0 0	8, 149	7,939	11,089
property date of	52103	28-17	485'54	28'03	, 0166	84:45	9:05	22'05	21:10
70 hrs are	450, \$81	2,58,645 0 0	81,43,153 0	1,95,105 6 0	LO,804 6 d	4,00,548 0 0	82,936	169,018	845,075

^{*} Includes audited figures for week ending 30th April 1236,

FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Assam-Bengal Railway.

to lead the rest	I SDING		To BOR WHEN DES JUNE 1897			L RECEIPTS OF A PRICE 1898 TO STREET 1898.	on lar	TOTAL	47	one Larg	Total	Total
	Proy miles workerd.	Mean adlance wareed.	Receipts.	Per mile worked	Mean mileage worked.	Total receipts.		Mean pailenge worked	Total receipts.	Per mile worked.	increase in 1406,	decrease in
20,000	90.42 Fr	200	Re. 30,178	12a, 56'85	286	Ze., 26,305	509 118	860	Ra, -1 1,88,424) h +00 h	Ra. 37,816	rich(D

BENGAL AND NORTH-WESTERN BAILWAY.

(INCLUDES TIBEUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 28th May 1898 on 884 miles open.

	Оодожине	Tharrio.	Mandalandina	Alo.	Other earnings (estimated),	Total enemiers.	TRAFFIG	Carin-Mir
The same of the sa	Number of passengers.	Receipts,	Weight carried.	Beceipte.	including steam-boat,		Deaching.	Marshan.
	7	Ra.	MDI,	Re,	Ba,	Ra.		
ntal traffic for the week on 856 miles open r per mile of rathway	1146,180 170°01	(a)89,270 69-40	6,18,050 717:84	(5)86,190 105:61	\$0.40 \$0.40	1,00,640	20,260	(djas,734
year (e) weeks of half-	9,447,275	10,85,479	1,07,98,654	15,11,684	3,11,548	28,48,704	502,776	495,687
Total for 31) weeks	2,593,485	10,84,742	1,14,06,654	16,01,874	3,81,518	30,18,144	414,000	FES.471
Comparisor.			-					
etal for corresponding week of previous year on \$15 miles spen or mile of railway degreespond-	180,006	83,164	8,23,118	61,796	33,591	1,48,071	17,779	(f)25,0131
ing week of previous year	148'33	65*75	1,0087#	75.88	41-19	162:79	419991	
of previous year or to	9,464,039	10,00,063	3,17,45,460	18,45,989	4,14,989	27,00,120	858,157	493,501

DARJEELING-HIMALAYAN BAILWAY COMPANY, LIMITED.

Approximate earnings for the week ending 4th June 1898 Corresponding period of 1897	and she	000 000	Ra. 18,519 16,867	0	0
Described tes are not described	944	199	2,848	0	0
Receipts per mile for the week ending 4th June 1898 Ditto for the corresponding period of 1897	991 W11	191 180	265 311	1	-
Decrease see see see	200	917	46	0	8
Beccipts from let January to 4th June 1896 Ditto for the corresponding period of 1897	004	*14	2,91,629 8,07,856	0	0
Decrease it. in the me	ANO	864	16,227	0	0

e due to anapirious season for celebrating Hindu marrages.

4. Straffic is slightly abuse normal. The comparison with the corresponding period is affected by an adjustment which was made in the sain
res for week enthing 20th May 1807; and to more ballast trains baving run which increased the quantity in the corresponding period of 197;

a decrease of about He. 2,000 under Forcy expanses. "Sundries" in the corresponding period include Res. 9,784 ch secount of Lies runs
a 1,084 miles of ballast trains run on even line.

1,355 miles of ballast trains run on open line.



The Calcutta Gazette.

WEDNESDAY, JUNE 22, 1898.

OFFICIAL PAPERS.

[Hon-Sudarribers to the Gazaren may receive the Superaneur separately on payment of Sia Rupses per annum if delivered in Calentia, or Twelve Rupses if sent by Post.]

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REMOTEVEN OF the year 1897 Construction of plague hospitals for the poorer chasses in		1573
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RESOLUTION ON THE ANNUAL REPORT ON LUNATIC ASYLUMS IN BENGAL FOR THE YEAR 1897.

MUNICIPAL DEPARTMENT-MEDICAL.

Calcutta, the 18th June 1898. RESOLUTION-No. 37HMedl.

READ-

The report on the Lunatic Asylums in Bengal for the year 1897.

Read also-

The report for the year 1896 and the Resolution recorded by Government upon it.

THE report which was submitted by Surgeon-Colonel Newman was received by Government on 18th April, which is most satisfactory.

2. The number of patients in the five native asylums during the past two years and the main facts regarding them are shown in the following statement:—

			1896:	1897.
Remained on 1st January	***	***	921	918
Admitted and re-admitted	544	,	181	201
	Total	111	1,102	1,119
Discharged oured	6++	***	61	64 28
,, improved	663		27	
not improved	0.00	444	21	8
otherwise	4.04	419	4	11
Died	***	***	90	90
	Total	4 in 4	184:	196
Remaining on 31 st December	+41	111	918	923
Daily average strength	**1	***	914	927

1258

4. The number of discharges rose from 94 to 106. The increase of 10 at Dullunda is accounted for by the transfer of six lunatics to other provinces, and by the larger number who were made over to friends. The increase of 5 at Dacca is said to have been due to an unusually high proportion of recoveries. At Patna there was a decrease of 6 owing to a smaller number of improved cases having been made over to friends. Criminal lunatics are required under the rules to remain in the asylum for a probationary period after recovery, and at Patna several applications for the release of relatives had to be refused for this reason.

5. The accommodation available was sufficient in all the asylums, except that at Dullunda both the male and female wards were for a time slightly overcrowded, but on this being reported 34 males and 4 females were at once transferred to other asylums. The five asylums can accommodate 1,137 patients, allowing 50 square feet for each, but the number confined in any one night did not exceed 992.

6. Of the 201 admissions, 126 are classified under mania, 45 under melancholia, 7 under idiocy, and the remainder under various other types. Sixty-four are attributed to physical causes, 15 to moral causes, and in 122 cases the causes were unknown. Of the 64 cases attributed to physical causes, 25 are ascribed to ganja-smoking, 3 to spirit-drinking, 20 to heredity, 2 to fever, 6 to epilepsy, 1 to bhang, and 7 to other causes. There were 5 more ganja cases than in the preceding year, 9 being reported from Dullunda, 7 from Patna, 4 from Cuttack, 3 from Berhampore, and 2 from Dacca. A careful diagnosis was made in every instance. In most of the Dullunda cases, however, it is said that the patients were also addicted to opium or alcohol, so that ganja was not the sole cause of their insanity.

7. The number of admissions to hospital fell from 898 to 667, but there was again a considerable increase in the average daily number of sick, which rose from 84.64 to 128.57. The rise in the daily number of sick at Dullands is ascribed by the Superintendent to the fact that a comparatively larger proportion of the lunatics admitted there were of an advanced age, and that the great majority of them were admitted in exceptionally bad health, due probably to the effects of the famine. The maintenance at Dullanda and the formation at Dacca of an 'infirm gang," the members of which received special care and treatment without being sent to hospital, seems to account for the small number of admissions to hospital at those two asylums. The present Inspector General of Civil Hospitals will be asked to consider whether this system, which his predecessor considered open to objection, should be maintained. It is satisfactory to notice that there was no cholera in any of the asylums, although several cases occurred in the neighbouring jails. The number of deaths amounted to 90, the same high figure as in the previous year. The death-rate, 9.70, was lower than that shown for the year 1896 by Bombay,

but higher than that of Madras, the Panjab, North-Western Provinces, and Burma for the same year.

The Lieutenant-Governor is glad to see that a variety of much appreciated

amusements was provided in all the asylums.

8. The number of injuries and accidents was 14 against 16 in 1896 and were mostly of an unimportant character. At Dacca, however, I lunatic committed suicide by hanging himself from the gratings of the cell. A judicial enquiry was held and one of the warders found to have been guilty of negligence: he was, however, only reduced to a lower grade, as the evidence did not warrant a criminal presecution. At Patna a lunatic was found with several ribs broken: a jemadar was reduced and a warder fined, but a special enquiry by the Magistrate failed to elicit what had happened. It is supposed he had been kicked by another lunatic. No escape took place from any of the asylums during the year.

9. The income and expenditure of the asylums for the past two years are

shown below:--

INCOME.

450		16	396.				1897	
		Re.				Ra.	A.	P,
1. 2.	Received from treasury Ditto from paying patients	83,349 2,150	11 12	0 10	90	,341 ,472	8 12	8
3.	Total Received from manufacturing de-	85,500	7	10	92	,814	5	2
4.	partment, less cost of raw materials Received from the Public Works	4,066	0	7	4	,587	1	3
	Department. Medical Store Department Stationery Office	4,389	5	6		482		4
	GRAND TOTAL	98,955	13	11	1,09,	834		9

EXPENDITURE.

		1896.				1897.			
1 - 1 - 1			Rs.	٨.	P.		Ra.	A.	P,
Establishment proper Superintendence Diot Clothing and bedding Bazar medicines Contingencies proper Repairs and maintenan Rates and taxes Miscellaneous Printed forms and static English medicines Public Works	100	P04	17,339 17,362 41,207 2,743 203 6,266 462 3,981 116 871 3,401	0 7 6 13 0 10	4 5 9 8	102 754	20,016 16,709 46,429 2,369 308 7,073 1,783 2,711 98 1,272 11,061	8 0 11 12 1 15 7	7 8 6 0 10 4 1
To		***		13			1,09,834	2	9

The increase in the gross expenditure amounted to Rs. 15,878, and occurred chiefly under the heads of Public Works, Diet and Establishment Proper. The increase under the first named head was chiefly due to repairs which were ascessitated by the earthquake. High prices in consequence of the famine and the grant of grain compensation allowance mainly account for the larger sums spent under the other two heads.

10. The gross cost of each lunatic at the different asylums for the past two years and the cost per head of average strength are given in the following table:—

				1896.	1897.
				Rs. A. P.	Re. A. P.
Dullunda	161	124		118 5 11	129 14 10
Dagos.	6.05	444		107 12 4	119 8 8
Patna	***	444	***	98 1 5	104 8 4
Cuttack		***	4.	190 6 0	160 8 2
Berhampore	PAI	***	***	84 2 5	118 8 11
Average ec	et in all a	sylume		102 12 0	118 0 e
Des	ails of cost	ļ.		1896.	1897.
				Rs. A. P.	Rs. A. P.
Establishment	841	4 99	4.1-1	97 16 9	8 6 68
Diet	4+1	141		45 1 0	50 1 1
Olothing and b	edding	44.	***	800	2 8 10
Medicina	***	101	441	1 2 10 .	1 11, 3
Contingencies	and miscel	laneove	6-01	. 7 5 9	9 8 10
Public Works			141	3 11 6	11 14 10
Rates and taxe		***		. 4.58	2 14 10
Forms and stat	tionery	+++	***	. 0'20	0 1 8
			*	102 12 0	118 7 0
				-	

11. In the dairy farm at Dullunda there was a loss of Rs. 1,133-8-3, about which the Superintendent has been asked to submit a special report. The dairy at Dacca was improved, while that at Berhampore which was opened in

1896 did not yield very satisfactory results.

Asylum at Bhawanipur, a number in both instances identical with that of the preceding year, while there were 36 patients remaining from the previous year. Recoveries, as in the preceding year, numbered 6; 10 persons were transferred to the care of their friends and 4 died, thus leaving 35 patients under treatment at the close of the year. The daily average strength was 21.65 males and 15.73 females, and the largest number confined in any one night was 24 males and 17 females. There was thus no overcrowding, as the asylum can accommodate 23 males and 19 females. There were only 8 admissions to hospital, and the general health of the inmates was good. The total expenditure rose from Rs 21,269 to Rs. 21,772, but towards this Government contributed only Rs. 4,218 against Rs. 11,635 in the previous year, and the average cost of each lunatic fell from Rs. 369 to Rs. 114. The reason for this was the larger sum realized from paying patients, Rs. 17,543 against Rs. 9,424 in the preceding year, an improvement mainly due to the exertions of the Deputy Superintendent, Mr. Lawton.

13. The thanks of the Lieutenant-Governor are due to Surgeon-Colonel Newman for his clear and concise report, and to the various Superintendents for their efficient management of the asylums under them during the past year.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

OONSTRUCTION OF PLAGUE HOSPITALS FOR THE POORER CLASSES IN THE TOWN OF CALCUTTA.

No. 3779Med., dated Darjeeling, the 19th June 1898.

From.-H. H. Reley, Esc., c.i.e., Secy. to the Govt. of Bengal, Municipal Dept.,
To.-The Commissioner of Police, Calcutte.

I am directed to acknowledge the receipt of your letter No. 5465, dated the 7th June 1898, submitting a letter from Babu Benode Behary Mullick, of Ram Bagan in Calcutta, in which he offers to pay Rs. 1,000 towards the cost of construction of plague hospitals for the poorer classes in the town of Calcutta.

2. In reply, I am directed to say that the Lieutenant-Governor has much pleasure in accepting the offer on behalf of the public. I am to request that an expression of His Honour's thanks may be conveyed to the donor for this generous gift. The money should be placed at the disposal of the Chairman of the Corporation of Calcutta. A copy of this letter will be published in the Calcutta Gazette:

WEATHER AND CROP REPORT.

For the week ending the 20th June 1898.

Burdwan.—Rainfall at Sadar 5.74, Kalns 3.00, Katwa 3.62, Raniganj 8.15. Heavy rain. Cultivation of aus paddy and sowing of aman paddy continue. Aman lands being ploughed. Oattle-disease reported from a few villages. Fodder and water ample. Common rice selling as follows:—

				Brs.	
Sadar	414	444		10 to 16)
Kalus	5.9.4		911	12 to 131 (121 to 14	per rupee.
Katwa	***	110	144	121 to 14	bor raboo.
Ranigani	***	444	441	181	Į.

Birbhum.—Rainfall at Sadar 5.93, Rampur Håt 4.57. Weather cloudy and rainy. Incessant heavy rain for three days. Prospects promising. Prices stationary. Fodder sufficient.

Bankura.—Rainfall at Sadar 22-77, Vishnupur 10-85. Heavy rain, which has rather injured the standing crops. Fodder and water sufficient. No cattle-disease reported. Common rice calls at 14 seers a rupee at Sadar and Vishnupur.

Midnapore.—Subdivisional reports not received. Rainfall at Sadar 12:29. Prospects of sugarcane and indigo good. Sowing of are paddy has commenced, but most of what sown will have been drowned. Disastrous floods in Gossye yesterday (19th). Great damage. Common rice 13 seers per rupes.

Hooghly.—Rainfall at Sadar '87, Scrampur 1'75. Jute and aus plants doing well. Common rive sells from 101 to 121 seems per rupes.

Howrah.—Rainfall at Sadar 1.76, Ulubaris 2.06. Weather threatening. 6ky overcast. Sowing of aman going on. Jute and ams progressing favourably. Fodder and water sufficient. Common rice sells at 10 to 12 seers per rupee.

24-Parganas,—Bainfall at Sadar 2'42, Barasat '83, Basirhat 1'77, Diamond Harbour 1'86. Weather hot; cloudy and drizzling. Young plants of aus and jute doing well; weeding going on. Lands being prepared for aman. Some cases of cow-pox reported from Sonarpur police-station. Fodder and water sufficient. Common rice sells as follows:—

			Sra,	
Sedar	200	190	10 to 12)
Barasat	199	400	111	per rupes.
Basirbat	***	000	13	f her auton.
Diamond Harbour		100	11#	1

Madie.—Rainfall at Seder 2.79, Kushtia 1.15, Meherpur 1.54, Chuadanga 1.35, Renaghat 1.38. Weeding progressing. Aus accellings, indigo and sugarcane doing well. Common rice selling at 10 to 13 seers per rupee. Fodder and water sufficient. No cattle-disease.

Murshidabad.—Rainfall at Sadar 2.27, Jangipur 1.10, Kandi 3.99. Weather seasonable. Bhadoi and jute plants progressing well. The rains are doing much good. Lands are being ploughed for sowing of haimanti paddy. No cattle-disease reported. Fodder and water sufficient. Common rice sells as follows:—

					Bre.
Sadar		***	***	6.00	1247
Jangipur Kandi	***	449	Bed	5.04	14 >per rupes.
Kandi	111	###	400	***	18 J* *

Jessore.—Weather almost cyclonic; windy and cloudy. Rainfall at Jessore 2.46, Jhenida 1.40, Magura 8.00, Narail 4.16, Eangaon 94. Ploughing and sewing of aus, amos and jute still going on. Weeding and harrowing commenced. Young paddy plants thriving well. No cattle-disease reported. Fodder and water sufficient. Price of common rice stationary.

Khulua.—Reinfall at Sadar 5.42, Bagerhat 5.01, Satkhira 8.24. Weather rainy. Cultivation of aus over; that of amen going on. Fodder and water available. Common rice sells as follows:—

Badar
Bagerhat
Setkhira

Setkhira

Brs.

11 to 13
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Dinajpur.—Average rainfall 1.52. Weather stormy with heavy rain. Condition of the standing crops good. No cattle-disease. Fodder and drinking-water ample. Rice calling at 13 seers per rupee.

Jalpaiguri.—Weather tot and cloudy. Rainfall at Sadar 12.52, Alipur Duars 15.36. Lands were being prepared for haimanti paddy. Standing crops doing well. Fodder and water sufficient. Common rice sells from 9 to 15 seers a rupee.

Darjeeling.—Rainfall at Darjeeling 4.03, Kurseong 7.59, Siliguri 8.03. Weather seasonable. Hills—Bhutta and potatoes being harvested; chhota and bara marua progressing. Terai—Bhadoi, jute, and sugaroane progressing. Prospects good. Coarse rice sells as follows:—

Hills—9 to 11 seers per rupee. Terai—13 to 16 ,, ,, ,,

Bistia sells from 18 to 28 seers per rupee.

Rangpur.—Rainfall at Sadar 2.21, Gaibanda 1.14, Nilphamari 3.14, Kurigram 5.35. Weeding of jute and caddy in full swing. Prospects good. Common rice selling at 10 to 13 seers a rupes. Fodder and water sufficient.

Bogra.—Average rainfall 2.98. Ploughing of lands for aman continues. Sowing of aman commenced. Rain doing much good to ass. Fodder and water sufficient. Common rice from 10 to 12 seems a rupee.

Pabna.—Rainfall at Sadar 4.71, Strajganj 3.47. Weather cloudy and rainy. Oropa doing well. Price of rice 9 to 12 seems per rupee.

Dacca.—Rainfall at Sadar 1.99, Manikganj 1.38, Munshiganj 2.88, Narainganj 4.03. Weather rainy and cloudy. Prospects of crops good. Fodder available. Cattle-disease prevalent in the Sadar sub-division. Common rice 9 to 11 seers per rupes.

Mymensingh.—Rainfall at Sadar 3.51, Netrokona 1.39, Kishorganj 1.59, Tangail 30. Monsoon has set in. Standing crops doing very well. Cattle are in good condition. Water and fodder plentiful. Common rice sells at 9 to 11 seers per rupee.

Faridpur.—Rainfall at Sadar 1-24, Goalundo 2-93, Madaripur 1-52. Weather rainy and damp. Prospects of crops good. Fodder and water sufficient. Common rice sells at 11 seers per rupee.

Backergunge.—Rainfall at Sadar 5.68. Weather showery. Prospects of crops fair. Common rice sells from 8 to 12 seers per rupee.

Tippera. — Weather seasonable. Rainfall at Sadar 6:15, Chandpur 5:28, Brahmanbaria 97. Prospects of crops favourable. Paddy and jute plants thriving. Harvesting of till completed. Fodder and water sufficient Rice sells from 8 to 11 seems per rupee.

Noakhali.—Rainfall at Sadar 16.96, Feni 7.80. Prospects of crops good. Cattle-disease continues at Senbag and Ramganj. Fodder and water sufficient. Average price of rice 10 seems per rupee.

Chittagong.—Rainfall 18-46. Weather seasonable. Prospects favourable. Rice still selling at 10 sears per rupee.

Patna.—Rainfall at Sadar '06, Barh 1'96, Bihar '32, Dinapur 1'63, Hitsa 1'45. Bihram '84. Condition of standing crops improved by the rain. Bhados sowings and marks transplantation going on. Prices almost steady. Common rice selling at 16 seers a rupee in Patna. Fodder and water for cattle sufficient.

Gaya.—Rainfall at Sadar 1-18. Rain has facilitated bhados sowings. Price of common rice 141 seers per rupes.

Shahabad.—Rainfall at Sadar I 56, Baxar I 26, Sasaram I 57, Bhabaa I 14. Bhadoi sowings commenced. Sugarcane doing well. Fodder and water sufficient. Price of common rice at Sadar 13 seers per rupee. Cattle-disease as before.

Saran.—Rainfall at Sadar '13, Siwan 2.76, Gopalgani 1.39. Weather seasonable. Indigo very good. Preparation for bhadoi sowings facilitated by recent rain. Fodder and water sufficient. Average prices are—common rice 12.8 seers and makei 20.2 seers, against 7.12 seers and 9.8 seers respectively last year.

Champaran.—Rainfall at Motihari 4:54, Bettiah 2:49, Barharwa :86, Bagaha 1:65, Ramnagar :75. Weather hot and cloudy. Sowing of paddy, makai, and kodo much facilitated by rain. Harvesting of chica fluished. Young crops of bhadoi already sown doing well. Fodder and water sufficient. Common rice sells at Sadar 12 seers, against average 14t seers per rupes.

Musaffarpur.—Rainfall at Sadar '17, Hajipur '88, Sitamerhi 5-18. Sowing of bhadoi crops in progress. Prospects good. Prices are—common rice il to 13 seers, wheat 144 to 15 seers, bariey 214 to 22 seers, makai 194 to 20 seers, gram 18 to 19 seers, and rahar 224 to 23 seers per rupes.

Darbhanga.—Rainfall at Sadar 2:30, Samastipur 39, Madhubani 4:64. Weather hot and cloudy. Sowing of bhadoi in progress. The rain has been beneficial to the standing crops. Fodder and water sufficient. Common rice 11 seems per rupes at Sadar.

Monghyr.—Rainfall at Sadar 64, Begusarai 08. Weather, very hot and occasionally cloudy. Sowing of bhadol crops continues. More rain urgently wanted for it. Indigo doing well. Common rice sells as follows:—

Monghyr 12 to 14 seems per rupes. Begusarai 11 to 13 ,,

Bhagalpur.—Weather seasonable. Rainfall at Sadar 2.22, Banka 23, Madhipura 08 Supaul 5.78. Transplantation of winter rice has commenced in some places. Standing crops doing well. Fodder and water sufficient. Cattle-disease reported from Protabganj in the Supaul subdivision. Prices of common rice are as follows:—

				- 1	Ses	. ch.
Sader	***	404	***		Sects	per rupes.
Banka		+41	144	3-5	25	99
Madhipura	111	***	946	13	99+	23
Supaul	***	***	***	161	37	9.0

Purnea.—Rainfall at Sadar 2.76, Kishanganj 3.16, Araria 2.30. Weather hot and cloudy. Recent rain has done much good to standing cropa. Weeding and harrowing operations going on briskly. Cattle-disease still prevails in Araria. Fodder and water sufficient. Common rice selling as follows:—

		,		Srs.	
Sadar	400			15)
Kishanganj	444	***	***	15	per rupee.
Araria	441	***		16	1

Malda.—Rainfall at Sadar '71, Chanchal 1.05, Shibganj 2.90, Gajole 1.70. Weather cloudy and rainy since Thursday (16th). A heavy shower of rain fell yesterday (19th). Young plants of bhadoi paddy and jute doing well. Ploughing going on for winter rice. Common rice selling at 13 seers per rupee. Fodder sufficient.

Sonthal Parganas.—Average rainfall 2.67. Ploughing in full progress. No new case of cattle-pox reported. Fodder and water-supply improving Price of rice 12 sees 14 chittack to 14 seers, and of maize 18 to 21 seers per rupee.

Angul.—Rainfall at Sadar 3:39. Sowing of paddy and bhadel crops in progress Price of rice 20 seers per rupes.

Hasaribagh.—Rainfall at Sadar 12.01, Giridi 3.53. Excellent weather for ploughing and sowing. Rice sells at 10 to 12 seers per rupes.

Lohardaga.—Rainfall 11:17. Sowing of paddy continues. Rice sells at Ranchi II seers per rupee, and in the interior from 11 to 16 seers per rupee. Cattle-disease dying out. Fodder and water sufficient. Grain in stock sufficient:

Palaman.—Rainfall at Daltonganj 3:37. Weather sessonable. Heavy rain everywhere. Makai, marua, sawan and kodo being sown everywhere. Sugaroane and gundli doing well. Rice selling from 12 to 16 seers per rupse.

Manbhum.—Rainfall at Sadar 19:25, Gobindpur 3:99. Weather seasonable. Prospects of crops on the ground good. Cattle-disease reported from thans Purulia. Fodder and water sufficient. Average price of common rice at Sadar 13 seers and at Gobindpur 12 seers per rupes. Supply sufficient.

SUPPLEMENT TO THE CALCUTTA GAZETTE, JUNE 22, 1898.

1265

Singhbhum.—Beinfall 6:48. Rice plentiful; from 12 to 14 seers per supes.

General Summary.—Heavy rain fell during the week over the greater part of Bengal Proper and over Chota Nagpur; in the other parts of the Province rain was general, but more moderate. The rainfall in Bankura and Midnapur was exceptionally heavy, and in the latter district disastrous floods are reported to have occurred causing great damage. Reports from all other districts are very favourable. Unltivation is going on rapidly everywhere, and the young crops of early rice and jute are doing well. Sugarcane and indigo are also thriving. Prices have slightly fallen in a few districts, but in most places steady. The supply of fodder generally is sufficient, but eattle-disease still exists in certain districts.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT, The 21st June 1898. M. FINUCANE,
Secretary to the Goot, of Bengal.

PRICES-CURRENT (retail) of Food-grains and Salt in the Mead

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At Rampur III the rotal price of salt is 9; seers par rupes.

At Rampur III the rotal price of salt is 9; seers par rupes.

In the subdivisions the retail prices of salt per rupes are:—Contai 9 seers; Tamluk 10 seers; Ghatai 9 seers (pangs).

In the subdivisions the retail prices of salt per rupes are:—Serampore 10; seers (crushed); Jahansbad 8 seers (pangs).

At Clubaria the retail price of salt is 10 seers 10% chitaks per rupes.

In the marks in the interior of the district the rutail prices of salt per rupes are:—Chatla 10; seers; Barasat 10 seers; In the subdivisions the retail prices of salt per supes are:—Kushtia (Rahadurkhii) 10% seers (pangs); Chusdaaga 9 seers (pangs).

Mohorpus 9 seers 2 chitaks (karkatah); Ramaghat 9 seers (crushed).

In the subdivisions the retail prices of salt per rupes are:—Lalragh 9 seers; Kauli 10 seers; Janglpur return not received.

Le the subdivisions the retail prices of salt per rupes are:—Jannita 9 seers (chitak; Magura 99 seers; Marail 3 seers III also subdivisions the retail prices of salt per rupes are:—Jannita 9 seers | Chitak; Magura 99 seers; Marail 3 seers III also subdivisions the retail prices of salt per rupes are:—Healragh 9 seers | Sakhira II seers.

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esters Station Bazars of the Districts of Bengal on the 15th June 1898. WHOLESALE PRICES

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the subdivisions the retail prices of salt (pange) per rapes are :—Nator 71 coers; Nowymen 8 seems.

Although the retail prices of salt is 3 score per rapes.

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The subdivisions the retail prices of salt per rapes; are:—Gaibanda 19 score; Milphamasi 10 score; Kappani the rotail prices of salt per rapes are:—Madesgan; 10 score 10 chitaks; the marks in the interior of the district the retail prices of salt per rapes are:—Madesgan; 10 score 10 chitaks; the subdivisions the retail prices of salt per rapes are:—Madesgan; 10 score 10 chitaks; Kappani 9 score; Munshirbat 10 score 10 chitaks; Mirkadim 10 score 10 chitaks; Jamaiper 8 score; Netrokono 8 score.

The subdivisions the rotail prices of salt per rapes are:—Coalundo 10 score (pange); Madariper 10; score crashed), scored.

PRICES-CURRENT (retail) of Food-grains and Salt in the Head-quer

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T. In the subdivisions the rotali prices of salt per rupes are: — Chandpur 9 seers; Brahmanbaria 9 seers 6 chitake

U. At Font Hat the retail price of salt is 7 seers per rupes.

VI. In the subdivisions the retail prices of salt per rupes are: —Bibur 9; seers, Barb 9; seers.

VI. In the subdivisions the retail prices of salt per rupes are: —Anhanahad 9 seers; Nawada 8; seers,

W. In the subdivisions the retail prices of salt per rupes are: —Anhanahad 9 seers; Nawada 8; seers,

In the subdivisions the retail prices of salt per rupes are: —Shwan 11 seers; (Depaigani (Mirgani)) 11 seers 10 chitake.

Y. At Bettiah the retail prices of salt is 10 seers per rupes.

Let the subdivisions the retail prices of salt per rupes are: —Hadhubani 10 seers and Situmarhi 11 seers.

In the subdivisions the retail prices of salt per rupes are: —Madhubani 10 seers oblitake; Samustipur 10 seers.

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In the Listanganj and Amria subdivisions the retail price of salt is 9 scors por rupes.

At Bain-Nawaganj and Amria subdivisions the retail price of salt is 9 scors por rupes.

In the subdivisions the retail prices of salt per rupes are :—Beath 9 scors por rupes.

Paker 10 scors (karkatch); Rajmahal 10 scors (karkatch),

At the subdivisions the retail prices of salt per rupes are :—Jajpur 8 scors; Kendrapara 9 scors.

At the subdivisions the retail prices of salt (panga) per rupes are :—Jajpur 8 scors; Kendrapara 9 scors.

At Cobindpur the retail price of salt is 9 scors per rupes.

PRICES-OURRENT (wholesale) of Food-grains, Firewood

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M. FINUCANE, Secretary to the Goat. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 12th to 18th June 1898.

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Month.	Date.	Nextmom in 1991.	Number of hour bright sunshing.	Mean pressure baro at 32º Fabr.	Mean,	Maximum.	Range	Mindound,	Mean wet bulb.	Valvour tension.	Dew point,	Mumidity.	Prevailing dire	Miles rocorded.	Rain,	Whatelea
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øł.	13th	164.0	5-8	1554	85-2	89·6	815	50-1	81:2	1.015	79 7	84	ESE	147	0-71	Partially day
11	14tl:	146:1	62	-468	84-2	88-8	8/8	80-0	181-0	1 019	79-8	87	ESE and SSE	141	0.31	Partially char i ord, p. c.
32	15th	140-1	3.0	-408	63-2	87.5	8+4	79:1	80-6	1.013	79-6	89	ESE	161	0.53	Chicay dazin
P)	FGt.b	105.8	Nil	-321	81.0	88 4	4.2	79-0	80:2	1.014	79-7	94	ENE and SW	175	0.41	Cloudy, o. 4,1
ď	17th	130:7	11	1879	814	8345	6.2	77/8	20-9	0.968	78-2	90	SW	298	0/39	Cluarly, or 2, 4
H	18th	122-6	ęę	•446	82:0	85-1	6-1	79:0	78-9	1985	77-2	83	sw	315	0.03	Cleady, a.d.
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thermometers are verified and the readings have been corrected to a standard constructed and verified at Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four in above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 5 fermerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV. and V of the official tables computed the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

O. Overcast: G. gloonov: d. drigging rains to present the ground that the property of the property of the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder.

J. H. GILLILAND Por Meteorological Reporter to the Goot, of India

MRTEOROLOGICAL OFFICE, GOVT. OF INDIA, Calcutta, the 20th June 1898.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 12th to 18th June 1898,

				A. M.			TREEPE	LATURE,			E	TGFOMPAS	T.	bours.
nions	14.	Date	b .	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	Dally mean	Maximum.	Range.	Minimum.	Dry bulb et 10	Wet bulb at 10	Vapour tension at 10 4.4.	Dew point at	Humidity at 10	Patafall, past 94 b
1996.				Inches.	۰	D			q	-	Inches.		2	Inoher
June er er er er er er	100 pp.	12th 13th 14th 15th 16th 17th 18th		29·637 , 593 , 514 , 442 , 380 , 382 , 470	88-9 86-4 86-7 85-9 82-9 81-9 88-4	96.8 92.0 93.0 90.2 86.0 88.0	17 9 11 2 12 7 10 4 62 82 92	79-8 80-8 80-3 79-8 79-8 77-6 78-8	89-6 80-4 87-4 82-0 82-1 82-0	82-5 83-0 78-6 81-6 81-6 78-6 79-6	1 017 1 041 -869 -995 1 063 -922 -968	79-7 80-5 74-8 70-1 81-1 76-7 78-3	78 75 69 70 90 83 87	0-21 0-44 0-86 0-76 0-17 0-07
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				10 a.m.						ув		107	80 Ipohes	
	Ti	ie tota	d f	all of n	sin from	m 12th	to 18t1	i June	1898		***	100	2.00	

The daily mean temperatures are the crude means of maximum and minimum temperatures.

METEOROLOGICAL OFFICE, BENGAL,

G. W. KUCHLER,

The 20th June 1898.

Offg. Meteorological Reporter to the Goet, of Hengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 18th June 1898, as compared with the corresponding week of the previous year.

Name	OF CARGO.		Water 30	edino Saturi P Junu 1896,	DAY, THE	White 23:	DING SATURD FR JUNE 1807,	AT, TES
	OF CARRO.		Number of boats,	Weight of	Tollage,	Number of boats,	Weight of cargo.	Totlaga.
			No.	M da.	Ra.	No.	Mds.	Ra.
Rice and paddy	144	491	98	11,165	126	182	88,655	570
irewood	691	191	10	6,350	83	13	16,380	168
ther articles	441		36	38,650	605	74	48,525	646
- seal elifoles	846.1	***	833	88,418	1,216	780	2,47,350	9,380
	Total		474	1,34,678	1,928	999	3,44,910	4,780

IRRIGATION DEPARTMENT, -BENGAL.

Bigisment showing heights over move sen-level and love-router in the Rivers Ganges, Rhagirathi, Jalangi, and Brahm. putra, for the mouth of April 1898.

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BRIDE	Reth			Reight over zero of gauge,	19	20000000000000000000000000000000000000
	Goalundo.	120	nequal mort	Height Height over near mean of gauge, pen-level,	118	60000000000000000000000000000000000000
	Goal	169	Prom' Benarios		11	Attendance opposite and and and and and and and and and and
	r Boulis.	08	-didaß mord	Height over meth suc-level,	16	1000 1000 1000 1000 1000 1000 1000 100
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CALMETTA, The 21st June 1838.

Weekly Beturn of Traffic Receipts on Indian Bailways.

RAST INDIAN RAILWAY.

Approximate Leture of Traffic for week ended 4th June 1898 on 1,705.09 miles open.

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Total for 22) weeks	7,588,505	79,94,630 E	0	9,85,61,083 20	1,94,11,084 9 0	4,08,781 0 0	8,79,06,475 7 0	1,078,187	5,785,925\ 3,00L	
Comparison.										
Total for corresponding week of previous year	580,4874	8,14,540 0	7	40,57,793 3	B,57,654 P B	29,189 0 1	11,08,418 10	91,129	150,000 10,0	
Per mile of milway correspond-	621701	184 15	1	114 807	908 12 B	11 18 9	760 6	1	ent range	
Total for corresponding 23-	7,091,492	78,46,545 1	1 7	9,81,78,000 1	E,98,08,881 1 11	4,96,966 8 0	1,69,40,940 13	\$,020,012	3,441,000 6,40,9	

^{*} Added No. of passengers 11,817 and † Deducted Mds. 2,19,406 and 2 Added

TARKESSUR BRANCH BAILWAY.

Approximate Keturn of Traffic for week ended 4th June 1898 on 2793 miles open.

Section 1 et	COACRING	TRAPPIO.	MERCHANDISS A	nd Minner HC.	Other entriors	Total earnings.	TRAFFIC TRAIF-RILM ML			
	Number of pastongers.	Conching zeesipte.	Weight ourried.	Resulpts.	(assisted).	Addr. strange.	Conching.	Marchan- dies.	Speak,	
Total traffic for the week Or per mile of railway For previous 214 weeks of half- year. Total for 23, weeks	38,604 BGI,005* BSS,667	Ra. A. P 4,851 5 0 21d 14 8 1,46,301; 0 0	12,580 10	Re. A. P. 871 7 0 90 11 3 14,265 11 04	10 & 6 0 7 2 200 0 03	5,405 19 0 943 0 7 1,50,776 4 0	2,104 20,539 24,663	\$,401 \$,401	はい	
Comparison. Telak for perceponding week of previous year. Per sale of railway corresponding week of previous year. Detal for corresponding 222, weeks of previous year.	Per dea	4,915 • 6 281 1 1 1,89,100 1 8	Pr. 1	676 11 6 36 8 8 16,711 6 0	0 8 P	280 14 0	49×18-	73 1,000	13	

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 4th June 1898 on 162:24 miles open.

	COACHIP	TRAPPIO.	hanogaupisa Taa	FF16.	Cab as assessed and		TRAPPIC TRAIL-KILL	
	Number of passangers.	Conching receipts.	Wolghh meried.	Receipts.	Other enraings (setimated).	Total carmings.	Conching.	Al probati- glam.
Total traffic for the week Or per mile of railway Far provious 21; weeks of hall- your. Total for 31; weaks	10,680 611,576°	Ha. A. P. 14,043 18 0 56 9 8 24,08,097 5 9	3620, 0. 1,06,177 80 22,85,218 201 ; 23,80,997 16	124. a. 3. 14,788 18 0 91 6 8 8,11,919 18 07	Ha. A. P	Rs. A. P. 10,000 9 0 178 1 8 7,00,000 9 0 7,55,153 1k 0	5,874 263,195 169,989	6,084 140,07 106,001
Sout for corresponding week af previous year	26.000 200,49 44	15,873 3 5 65 6 6 5,86,270 0 6		11,155 9 0 69 H O 8,45,116 J 11	69 LF 0 0 0 3 1,887 13 3	194,688 11 2 159 8 8 6,94,785 7 5	154,914	81,151

Ha. 5,000 on account of difference between the approximate and andited figures for the weeks exist ... 10,855 on account of difference between the approximate and andited figures for the week exist ... 4,244) and 30th April 1895.

^{*} Added number of passengers 4,950 and deducted Re. 45 on account of difference between the approximate and sudied figures for the wells and substitution Eds. 196 and added 2 and substitution and sudied figures for the wells and substitution and sudied figures for the wells and substitution and sudied figures for the wells and substitution and sudied figures for the wells and substitution and sudied figures for the wells and substitution and sudied figures for the wells are also and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitution and substitutio

EASTERN BENGAL STATE BAILWAY.

(INCLUDING N. B., DACCA, R.-D., AND ASSAM-BREAK SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 11th June 1808 on 818 miles

		o Trappi	C,		TRAPPIC,			Othere	Other earnings (including		Total	Total		Transio Teals-Miles ave;			
	Number of passentings.	Comebi			Weight carried,		Raceip	Receipte.		forey).			iters lagg.		Conshing.	Merchan-	Total.
		Be.	A. I		M.no.	ø.	Re.	å, 2.	Re.	A.	P.	Ba,	A.	T.			1
o promis for the week o promis of reflect to previous \$2 weeks of half-	103,16 0 247	96,600 118	9	0	700,320 650	0.0	1,06,100	# 0 + 0	6,14		0	3,86,790	Đ	0	81,700	#1,8#6	64,53
7=	4,615,087	13,63,593	0	0	1,00,68,900	0	81,72,894	0 0	5,53,04	6 0	0	\$8,00,334		•	744,306	Brill man	101
Couranteer.	4,907,847	34,00,585		<u>a</u> _	9,03,81,129	0	22,79,494	0 0	3,59,66	0	•	60,99,126	_	-1	777,018	787,373 819,906	1,631,686 1,686, 3 16
My period year	195,210	94,077	_	-	0,26,602	û	98,598		4,46		0	1,09,005	٥	0	88,00Y	81,671	
be well of previous year mile corresponding date of perions year	4,651,033	114			770 1,16,86,685	1		0 0		9 0	-		0		***	orfette	417
			-		triansi of ORD	•	27,33,948	0 0	3,44,38	L O		14,97,844	ō	0	775,697	200,022	1,064,700

^{*} Andited up to 13rd April 1888, † Excluding space-book carnings.

DACCA STATE BAILWAY.

Approximate Between of Traffic and Mileage for the week ended 11th June 1898 on 86 miles open

	COTORIA	6 TEAPPI	a.	MERCHANT	PRA	AND MINNEAL PPIC.	Other earnings.		Total	Tharmo	TRAFFIC TRAIT-MILIS ROS		
	Number of	Conch		Weight carried.		Receipts,		- Mart colligio	anroings,	Conching.	Merchan-	Total	
na traffic for the weak		Ba,	A. P.	Mps.	s,	84. A. T.	Ba.	de P.	Bt. 4. 2.	1			
Marino of sellary	23,786 888 880,582	7,850 84 1,67,365	0 9	21,980 245 2,13,152	0	1,800 0 0 23 0 0 79,676 0 0	110		9,516 g s	2,647	1,581	4,50	
Total for 36 weeks	672,322	1,74,686	0 0	8,88,972	0	80,966 0 0	4,300	0 Q	2,60,050 0 0	87,196 50,778	40,500	17,00	
Companings.											43,983	108,18	
or of previous year week and of railway our responding week with the corresponding week	30,860	8,762	6 g	18,045	0	1,881 + +	48		7,180 è o	5,277	1,140		
Hims year	139 478,694		0 0	266	٥	15 B +	1	0 0	BB 0 0	*****	711004	3,560	
	200,020	1,47,468	• •	7,25,609	•	60,646 0 0	4,488	0 0	3,15,120 + +	89,847	30,810	00,100	

[·] Audited up to Mrd April 1808,

BENGAL CENTRAL RAILWAY COMPANY, LIMITED.

Approximate Return of Traffic and Mileage for the week ended 11th June 1898 on 125 miles open

	Оолежия	· TRAFFIC.	Manchandien Tea	APD MINNEAL, PPIC.	Ì		TRAPPIC	Traff-Mil	De Lou,
	Number of passingure.	Conching succespes.	Weight carried,	Receipts.	Other earnings.	Total Chromas	Conching.	Merchan- dise,	Total
of traffic for the week	,	Ba. a. p		84. A.P.	Bo, A.P.	Ba, a. p.			1
previous 21 weeks of half-	#80 #6'00#	15,080 e 6		2,975 0 0 24 4 0	247 0 0 3 0 0	16,330 0 6 120 0 0	8,100	1,007	7,20
Total for 12 weeks	714,346	3,05,163 0 0		VS,047 0 0	65,022 6 0	401,171 0 0	1,11,698	40,000	1,68,9
141	744, 358	8,17,968 0 0	18,52,847 6	96,940 0 0	60,969 0 0	4,76,451 0 0	1,16,749	40,676	1,65,4
de corresponding week for corresponding week for corresponding week for corresponding week for corresponding week for corresponding week for corresponding week for corresponding week for corresponding week	97,881				-				
to ourseponding date	308	100 0 0	51,165 0	4,000 0 0	50 B o	84,979 0 0	4,797	3,407	2,8
beriots your	781,884		409 0	27 0 0	124001	300 # ⊕	F-940 6 4 -	DOM NOT	ridem
	s or lides	8,08,748 8 8	18,66,666 0	80,846 0 0	8,998 a g	\$11,370 a a	90,916	80,744	1,63,46

^{*} Audited up to Sied April 1806,

BENGAL AND NORTH-WESTERN RAILWAY,

(INCLUDES TIRBUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 4th June 1898 on 8650 miles open.

	COLORIPA	TRAFFIC.	MARGMAN DIS	e and Minney.	Uther carnings	il otalearnings,	TRAFFIC PRAIS-MILES		
	Number of passengers.	Receipts. Re. (a)54,470 02:96 10,88,966 11,88,376	Weight carried.	Receipts.	including stream-bout.		Onaching.	Mershan-	· ·
		Ro.	Mos	Be.	Bq.	Ra			Ì
otal traffic for the received on \$65° miles open or pur taile of reflway	127,990 164'86	(a)\$4,4}0 62'96	8,76,000	(b) 48,870 6876	(5)15,460 17:41	(8)1,14,140 136:37	10,178	(c)00,406	
for previous Eli weeks of heli-	1,507,640	10,88,064	1,74,62,764	16,03,469	3,29,233	30,16,445	616,467	819,166	1
Potal for 113 weeks	5,784,659	11,88,876	1,10,28,234	26,60,099	8,66,819	31,32,765	434,739	049,810	
Companies.									
total for corresponding week of previous year on \$15 miles open	110,520	46,991	7,10,980	11,704	29,960	1,42,060	15,605	(e)35,304	
er mile of railway correspond- ing week of previous year	160'08	87168	871'81	68:00	38'08	174-28	411+44		1
forth to corresponding date	1,464,165	19,47,056	1,54,54,780	14,17,788	4,37,354	20,05,170	248,989	417,896	-

The mileage given here is the average for the week. The Balrampur-Tulnipur Branch, viz., 19; miles, was opened from the 1st June 1801.;

(a) Increase due to suspicious season for miletrating bindle zon ranges.

(b) Decrease chiefly due to the traffic intent over at Makameh Ghat helog restricted by the H. L. Ry.

(c) Includes 1,100 without 6 ballast trains run no open line.

(d) and the digures up to week suding Pin April 1805.

(e) 1,032 miles of ballast trains run on open line.

ASSAM-BENGAL RAILWAY.

Approximate Return of Traffic for the Week ended 11th June 1898 on 288 miles on

	Оодонии	a Trappio.	Marchardtan Thai	and Minupal pro.	Other earnings	Total samples	TRAFFIC TRAIN-MUM 101.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	(estimated).	TORK BELLEGES,	Couching.	Murchan- dise,	Total,
		Be, A. F.	Mps. s.	R4. 4. F.	24. A. P.	Ba. A. P.			
Total traffic for the week. Or per mile of railway For previous 21 weeks of half-	38,170 91:88	14,033 0 G 62'90	2,26,477 0 791:48	10,389 6 0	948 0 0 0'85	\$5,696 0 0 88'49	8,978 10 78	4,984 13°44	4120 90 ML
Actual of the second of succession	685,745	5,51,469 0 0	52,20,519 0	1,92,763 0 0	14,520 0 0	6,68,75g 0 D	69,479	100,098	271.00
Total for 28 weeks	61 L, 536	2,86,429 0 D	54,05,096 0	2,93,16L 0 0	14,700 0 0	0,84,361 0 0	71,551	107,000	THUM.
Comparison.									
Total for corresponding week of provious year	16,760	9,120 0 0	\$,10,628 O	10,188 0 0	67B O 0	10,107 o o	8,358	7,140	11,400
first week of previous year	4616	30-33	584190	28-15	1-33	66'70	D*55	19:68	9798
prerious year	478,041	9,60,000 0 0	41,85,400 0	2,06,238 0 0	11,878 0 0	4,66,279 0 0	85,612	249,106	MARK

^{*} Includes audited figures up to week ending 7th May 1808,

FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Assam-Bengal Railway.

PROSECUTE FOR WHER BEDLEO RECEIPTS FOR WHER REDIED LITE JUNE 1860.				5 Automitro en Phil 1896 to [] Jour 1898,	TOTAL	BECKIPTS FRO ELL 1897 TO 121 JUNE 1897.	Total	Total decrease in					
Menn milnage worked,	Receipts.	Per mile warhed.	Mean adioare worked.	Secripta,	Per mile worked.	Mean minute worked.	Total receipts.	Per mile worked per work,	Mean influers worked	Potal receipts.	Per nade worked- per neck.	1998,	3160.
	No.	Re.		Re.	Es.		<u>Pa</u> ,			Ba.]	Ba,	
3486	25,595	09:49	340	19,737	88.70	896	2,51,600	vared	360	5,05,231	A==>4#	43,487	

DARJEELING-HIMALAYAN HAILWAY COMPANY, LIMITED.

Approximate earnings for the Corresponding period of 1897	week end	ling 11th Ju	me 1898	P01	est.	Ra. 12,802 13,672	0	0
Decrease	044	*	ata.	. 994	+04	870	0	0
Receipts per talle for the wor Ditte for the corresponding	k endin	g 11th June f 1895	1898	PRO- Text		251 268	0	3
Decrease	**	004	-	***	***	17	0	11
Receipts from 1st January to Ditte for the corresponding	11th Ju	ne 1898; of 1897	=	200 800	110	3,04,431 8,21,528	0	0
Decrease	100		100	444	494	17,097	0	0



The Calcutta Gazette.

WEDNESDAY, JUNE 29, 1898.

OFFICIAL PAPERS.

[Non-Subscribers to the Gazette may receive the Supplement separately on payment of Six Rupees per annum if delivered in Calcuita, or Twelve Bupees if sent by Poet.]

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Average wholesale prices current of incharming, fleewood	1979	A DRICTAGE STATES THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY	1267
ac, in the undermentioned marts of Bersyal for the year anding 3rd March 1898	1283	April 1898 Contest Oppose for the month of	1288
	1386	Washing nature of Tarihi Basis	1990

WEATHER AND OROP REPORT.

For the week ending the 27th June 1898.

Burdwan.—Rainfall at Sadar 6.28, Kalna 5.25, Katwa 5.48, Raniganj 6.23. Weather very hot. Rain of last week has done much good to standing crops. Weeding of aus paddy continues. Transplantation of aman paddy commencing. Fodder and water sufficient. Common rice selling as follows:—

				Sra.	
Sadar	***	***	141	114 to 16)
Kalna	***	66.6	114	I2 to 13	
Katwa	244	140		13 to 14	per rupee.
Raniganj	911	141	4.9	18)

Birbhum.—Rainfall at Sadar 9.38, Rampur Hat 11.37. Weather hot and cloudy Ploughing and sowing of paddy going on. Paddy seedlings doing well. Fodder sufficient. Price of rice at Sadar 12 seers and at Rampur Hat 13.11 seers per rupee.

Bankura.—Rainfall at Sadar 14, Vishnupur 2.33. Weather sultry and occasionally overeast Rain wanted. Harvesting of til over. Fodder and water sufficient. No cattle disease reported. Common rice sells at 14 seers a rupee at Sadar and Vishnupur.

Midnapore.—Rainfall at Sadar '56, Contai '22. Prospects of indigo and sugarcane hopeful. Ploughing and sowing continue. Price of common rice at Sadar 13 seers and at Contai 13 to 14 seers por rupee. Reports from Tamluk and Ghatal not received. Results of floods not yet ascertained.

Hooghly.—Rainfall at Sadar 2.49, Scrampore .99, Jahanabad 1.79. Jute and aus plants doing well. Lands being prepared for sowing winter paddy. At Jahanabad the overflow of the river Durokeswar has damaged the winter paddy seedlings and other vegetables of the field. Common rice sells from 10 to 12; seems per rupeo.

Howrah.—Rainfall at Sadar '49, Ulubaria 1'34. Weather hot. Sowing of aman going on. Aus, jute, and sugarcane somewhat damaged in Ulubaria by floods in the Damudar and Rupnarain. Fodder and water available. Common rice sells at 10 to 12 to 12

24-Parganas.—Rainfall at Sadar '79, Barusat '68, Basirhat 1'22, Diamond Harbour \$00. Weather hot. Jute and aus plants doing well. Weeding of jute and aus and sowing of aman going on. Fodder and water sufficient. Cattle-disease diminishing. Common rice sells as follows:—

			DIB.	
Sadar	149	****	10 to 12)
Barasat		484	114	per rupes.
Basirbat	87.5	884	18	Lin a - Koo.
Diamond Harbour	***	864	114	1

Nadia.—Rainfall at Sadar 4.47, Meherpur 4.41, Kushtia 3.40. Weeding and harrowing continuing. The rain has damaged the young paddy plants in Meherpur to some extent. Indigo, sugarosne, and jute doing well. Common rice selling at 10 to 11 seers 7 chittaks per rupee. Fodder and water sufficient. A few cases of cattle-pox in thanas Sadar and Tehatta.

Murshidahad.—Rainfall at Sadar 11.52, Jangipur 4.64, Kandi 12.77. Weather very hot in the latter part of the week. Bhadoi and jute plants are thriving well. The state of indige and mulberry seems to be good. Lands are being prepared for sowing of haimant paddy. No cattle-disease reported. Fodder and water sufficient. Common rice sells at Sadar 124 seers, Jangipur 14 seers, and Kandi 13 seers per rupee.

Jessore.—Weather variable: generally hot and close. Rainfall at Jessore 2.89. Jhenida 3.65, Magura 4.44, Narail 3.92, Bangaon 2.97. Sowing almost over. Weeding and harrowing going on. Prospects of standing crops fair. No cattle-disease. Fodder and water sufficient. Common rice sells as follows:—

			Srs.
Jessore	***	***	11 to 12)
Jhenida	+4.1	189	11
Magura		411	111 to 12 per rupes.
Bangaon	***	101	111 to 124
Narail	4.44	1 = 1	6-69 ch.

Khulna.—Rainfall at Sadar 4.71, Bagerhat 7.20, Satkhira 2.43. Weather seasonable. Oultivation of aman paddy going on. Fodder and water available. Common rice sells as follows:—

					Brs.
Sadar	4-7	444	***	10	to 13)
Bagerbat Satkhira	400	***	100	454	11 per rupee.
Satkhira	417	***	984	144	18)

Rajshahi.—Rainfall at Sadar 6:77, Nator 8:21, Naugaon 9:19. Prospects of crops good. No cattle-disease. Fodder and water ample. Rice sells from 11 to 13 seems per rupee.

Dinajpur.—Average rainfall 7.89. Weather rainy for the most part of the week, close and sultry towards its end. Condition of the standing crops good. Cultivation of haimant commenced. Fodder and drinking-water ample. No cattle-disease. Rice selling at 13 seers per rupse.

Jalpaiguri.—Weather rainy and hot. Rainfall at Sadar 14.24, Alipur Duars 17.26. Onlivation of haimanti paddy going on. Prospects of standing crops favourable. Common rice sells from 7 to 14 seers a rupes. Fodder and water sufficient.

Darjeeling.—Rainfall at Darjeeling 5-22, Silignri 5-06. Weather seasonable. Hills—Bhutta, potatoes and marua doing well. Teras.—Jute, bhadoi and sugarcane doing well. Coarse rice sells—

Hills—8 to 11 seers per rupes. Terai—11 to 15 ,, ,, ,,

Bhutta sells from 18 to 28 seers per rupee.

Rangpur.—Rainfall at Sadar 11.20, Gaibanda 12.19, Nilphamari 13.89, Kurigram 15.87. Aus being harvested. Lands under preparation for transplantation of winter rice Prospects fair. Common rice selling at 9 to 13 seers per rupes. Fodder and water sufficient

Bogra.—Average rainfall 9.00. Ploughing of lands for aman continues with vigout. Sowing of aman going on. Fodder and water sufficient. Common rice sells from 10 to 124 seers a rupee.

Pabna.—Rainfall at Sadar 2.82, Sirajganj 8.73. Weather cloudy and rainy. Crops doing very well. Price of rice 9 to 12 seers per rupes, but rice sells at 10 to 11 seers in the majority of thanas.

Daces.—Rainfall at Sadar 6.65, Manikganj 6.64, Munshiganj 6.34, Narainganj 5.38. Weather cloudy and rainy. Prospects of crops good. Fodder available. No cattle-disease this week. Common rice 10 to 11 seers per rupee.

Mymensingh.—Rainfall at Sader 17.25, Netrokona 15.56, Kishorganj 17.45, Jamalpur 14.05, Tanguil 7.03. Continuous rain. Aus and jute doing well. Sowing of aman begun. Cattle in good condition. Fodder and water-supply ample. Rice selling at 9 to 11 seers por rupee.

Faridpur.—Rainfall at Sadar 5-92, Goalundo 5-02, Madaripur 8-93. Weather damp and close, rainy. Prospects of crops good. Fodder and water sufficient. Common rice sells II 11 seers per rupee.

Backergunge.—Rainfall at Sadar 2.66. Weather warm. Prospects of crops fair.

Tippera.—Rainfall at Sadar 8-25, Brahmanbaria 8-63, Chandpur 4-83. Weather seasonable. Prospects of crops favourable. Paddy and jute plants thriving. Harvesting per rupse.

Neakhali.—Rainfall at Sadar 5:38, Feni 13:68. Prospects of crops good. Cattle-disease continues at Ramganj. Fodder and water sufficient. Price of rice 10 to 12 seers per rupes.

Chittagong.—Rainfall 14-95. Weather seasonable. Aus being sown. Prospects improving. Rice selling at 11 seers per rupee.

Patna.—Rainfall at Sadar 186, Barh 170, Bihar 162, Dinapur 294, Hilsa 75. Bikram 140. Sowing of paddy commenced. Harvesting of china nearly completed. Transplantation of marua and sowing of Indian-corn going on. Prices almost stationary. Common rice selling at 15 seers per rupes in Patna. Fodder and water for cattle sufficient.

Gaya.—Rainfall at Sadar 1·18, Jahanabad 1·93, Aurangabad ·97, Nawada 5·24. Ploughing and bhadoi sowing going on. Marua being transplanted. More rain wanted. Price of common rice 14 seers per rupee.

Shahabad.—Rainfall at Sadar 2.42, Buxar 33, Sasaram 07, Bhabua 06-Sugarcane good. Bhadoi sowings progressing. More rain wanted. Fodder and water sufficient. Cattle-disease in one village in Sasaram. Common rice at Sadar 13 seems per mapee.

Saran.—Rainfall at Sadar 1.62, Siwan 2.65, Gopalganj 1.32. Weather sultry. Indigo and sugarcane very good. Bhadoi sowings commenced. Seeds germinating well. Fodder and water sufficient. Cattle-disease continues in north. Average prices are—common rice 12.9 seers and makai 20.15 seers, against 8.3 seers and 10 seers respectively last year.

Champaran.—Condition of standing crops improved by rain. Bhadoi sowings continue. Some weeding going on. Transplantation of paddy has commenced in some places, but more rain is wanted. Fodder and water sufficient. Common rice sells at Sadar 111 seers per rapee, against average 142 seers.

Muzaffarpur.—Rainfall at Sadar 1.27, Hajipur 2.52, Sitamarhi 5.75. Prospects good. Bhadoi sowings in progress. Rain seriously wanted, especially in the Sadar subdivision. Prices as under—common rice 11 to 13 seers, wheat 14 to 15 seers, barloy 22 to 23 seers, makei 19 to 20 seers, gram 19 to 20 seers, and raker 22½ seers a rupee.

Barbhanga.—Rainfall at Sadar 1.92, Samastipur 49, Madhubani 3.23. Weather generally cloudy and hot. Sowing of bhadoi going on. More rain wanted. Fodder and water available. Price of common rice stationary at Sadar.

Monghyr.—Rainfall at Sadar 95, Begusarai 1.77, Jamni 1.76. Weather very hot. Biadoi sowings continue. State of standing crops excellent. Common rice sells as follows:—

Monghyr
Begusarai
... 12 to 16 seers per rupee.
... 11 to 13
Jamui
... 14

Bhagalpur.—Weather excessively hot. Rainfall at Sadar 111, Banka 3-91, Madhipura 2-63, Supaul 3-99. Sugareane and indigo doing well. Cattle-disease reported from follows:—

9.3				Brs.	ch.	
Sadar Banka	***	101	***	18	14 per ra	ipee.
Madhipura		***	***	15	19 1	9
Supaul	414	416	144	16	73)	1
	744	104	***	16	22 1	3

Purnea.—Rainfall at Sadar 1.69, Kishanganj 4.48, Araria 5.07. Weather hot and cloudy. Prospects of standing crops good. Transplantation facilated by recent rain. Rivers rising. Twenty-four cases of kaladukh reported from outpost Bhatgaon, out of which three are said to have recovered. Oattle-disease reported from Matiari and Sikti outposts in the Araria sub-division. Fodder and water sufficient. Common rice selling as follows:-

15 to 16 15 per rupee. Sadar Kishanganj ... Araria

Malda. - Rainfall at Sadar 5:03, Chanlehal 6:69, Shibganj 1:71, Gajole 8:14. Weather hot and cloudy with occasional showers. Bhadoi paddy and jute are being weeded. Seed. lings of winter rice are ready for transplantation. Coarse rice sells at 12 seems per rupee. Fodder ample.

Sonthal Parganas.—Average rainfall 4.44. Ploughing is in full progress. Trans. plantation retarded for want of seedlings. Sowing of Indian-corn commenced. Fodder and water-supply sufficient. Price of common rice 12 to 14 seers, and of maize 18 to 20 seers per rupee.

Cuttack.—Rainfall at Sadar 2.32, Jajpur 28, Kendrapara 85, Banki 81, False Point 17. Weather very that and rain required. Guru and laghu sarad growing. Cotton being plucked. Jute being cown. Condition of cattle generally good, but disease still continues in places. Fodder sufficient. Common rice sells as follows:-

> 125 Outtack ... Jajpur *** per rupes. 18 Kendrapara 154) Bunki

Balasore.—Rainfall at Sadar '07. Sugarcane growing well. Sowing continues. Seedlings that are out are thriving well. Are seedlings are growing well. Price of rice varies from 13 to 18 seers per rupes. Rice sells at 13 and 16 seers per rupes at Balasore and Bhadrak respectively. Fodder and water sufficient.

Angul.—Rainfall at Angul nil, and at Khundmals 3.46. Sowing of paddy and bhadra crops still going on. Common rice selling at 20 seers per rupes at Angul and 12 seers at Khondmals.

12 seers at Khondmals.

Pari. -Rainfall at Pari '03, Khurda '50. Sowing of sarad continues. growing well. Cotton being gathered. Sugarcane promises well. Fodder and water sufficient. No cattle-disease reported. Common rice sells as follows:—

> Puri Khurda ... 13 12 Interior of district ... 11-13 to 17-1

Hazaribagh.-Rainfall at Sadar '44, Giridi '77. Weather seasonable. Sowing in progress. Excellent mango orop. Rice sells at 10 to 12 seers per rupee.

Lehardaga.—Ploughing and sowing continues State of standing crops good. Rico sells at Ranchi 11 seers per rupes, and in the interior from 11 to 15 seers per rupes. Cattle-disease diminishing. Fodder and water sufficient. Grain in stock sufficient.

Palamau.—Rainfall at Sadar 1.14. Weather hot. More rain wanted for cultivation of bhadoi. Sugarcane doing well. Rice sells from 11 to 15 seems per rupee.

Manbhum.—Rainfall at Sadar 3-74, Gobindpur 4-54. Weather seasonable. Prospects of crops good. Cattle-disease not reported. Folder and water sufficient. Average price of common rice at Sadar 18 seers per rupee, and at Gobindpur 12 seers per rupee. Supply sufficient.

Singhbhum.—Rainfall 69. Rice plantiful, from 12 to 14 seers per rupee.

General Summary.—There was general rain during the week, and in some parts of Bengal proper it was heavy. More rain is still required in parts of Bihar and Orissa. The cultivation of the autumn crops and of winter rice is progressing. Early rice, jute, sugarcane, and indigo are doing well. The extent of damage done by floods in Midnspore has not yet been ascertained. Floods in parts of Hooghly and Howrah are also reported to have caused some damage to the crops. Prices remain practically stationary. Fodder and water for cattle are generally sufficient, but cattle-disease though diminishing is still reported from cortain districts. from cortain districts.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT, The 28th June 1898.

M. FINUCANE, Secretary to the Gout. of Bengal.

1288

The following statement is published for general information.

M. FINUCANE,
Secretary to the Government of Bengal.

REVENUE DEPT., The 22nd June 1898.

AVERAGE WHOLESALE PRICES-CURRENt of Food-grains, Firewood, &c., in a

Prices per mand

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	2	Burdwan	4.	12	0	4	0	10	4	(4) 6	10					***			***	,	9.61	4	5	۵	İ			Fi Fi	1	11		149		4	7 1:	1 .
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of prices returned for 1 fortnight only.

o ditto for 2 fortnights only.

o ditto for 3 ditto.

o ditto for 6 ditto.

u ditto for 9 ditto.

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7. Chittagone.

e. Patna.

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3 2 5 -

9. Muzaffarpur.

10. Bhagalpur.

11. Cuttack.

12. Banchi.

mentioned Marts of Bengal for the year ending 31st March 1893.

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No fixed

Results of the Meteorological Observations taken at the Alipore Observatory from 19th to 25th June 1898

	1		WIND.	_ l i.	TRT.	O BOM B	Hr	1	TURK.	MPBRA'	T	3	ō :		·	<u> </u>
WLATE	Rain,	Miles recorded.	Prevailing direction.	Humidity.	Dew point,	Vapour tension.	Mean wet halb.	Minims spo.	Rango	Maximum.	Meno.	Name presents barometer at 32° Febr.	Number of bonz bright sonahine	in a	Data.	Munth.
	Inches.			%	7	Inchos	+ 1	• 1		10		Inches.				
Cloudy, b.	Kil	285	WSW hea WS	82	.78-0	0.961	79-8	80-2	7.5	87:7	84-1	29 482	Na	128-5	1944	June
Chiefly Man	0-21	172	SW and SSW	83	79'5	1:010	81.8	79-2	13'4	92.6	85-6	-480	4.0	146-9	20th	п
Cloudy, c.	Nil	169	SW, WSW, and 8	79	79-8	1-020	83.9	82-2	11.9	93-5	87-2	-460	Nil	146 2	21st	10 1
Partially de	13	213	SW. WSW, and	78	79-6	1.012	82-1	8:4	14.9	97*3	88-6	467	6.8	148-8	22nd	**
Chiefy del	0-01	1,89	ESE, SSE, and variable.	82	78-1	0*962	70-8	76-6	11.9	88-5	B4 2	-522	1-9	141/6	23rd	10
Chiady sing	0.05	105	8SW and ESE	77	76-5	-913	78-8	72-2	204	92-6	84-2	-550	9:0	145*7	24th	11
Chefy sh	Nit	86	95W and WNW	71	78-8	-970	81-3	90-4	16.9	96-9	88-7	•559	9.4	151:7	25th	b2

		41	12ches 29-504
The mean pressure of the seven days The average pressure of the corresponding period for 2 Office	4 years, Surveyo	r-General's	29-525 Boors, 31-1
The total number of hours of bright sunshine The maximum possible number of hours of sunshine		-44	949
	01	Annuarata.	86.1
The average temperature of the control	for 24 years,	Patrielor	844 251
The extreme variation of temperature	444 111	,	97 3 Miles
The highest velocity of the wind in one hour	***		79
The mean relative humidity The average relative humidity of the correspondit	ng period for	24 years,	84
Surveyor-General a Other	***		1.00m 0.87
The total fall of rain from 19th to 25th June 1898 The average fall of the corresponding period for 24	years, Survey	or-General's	3.08
Office		***	10.39
The total full from 1st January to 25th June 1598 The average fall of the corresponding period for 2-	4 years, Survey	or-General's	19-45
Office for any deduced from	the traces of the	10 Barograph	and The

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and The and from observations made at 6h, 10h., 16h., and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. Therefore thermometers are verified and the readings have been corrected to a standard constructed and verification. They are exposed under a that ched shed open at the sides, and are suspended above the ground.

Above the ground.

The larometer readings are corrected approximately to those of the standard, Newman's formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables of the Moteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemoge.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; d, drizzling rain; p, passing temporary showers; lr, lightning rain; 📥 dew.

METERMALORICAL OFFICE, GOVT. OF INDIA, Calculta, the 27th Juna 1898.

J. H. GILLLAND, For Metaorological Reporter to the Got logical Office, Chowringhee, from 19th to 25th June 1898.

		A.X	reduce			J.KMBRI	RATUHE.			E.	TOBOLETR	w.	Pours.
les r H	Perc	41		Daily mean.	Maximum.	工作 工作 工作 工作 工作 工作 工作 工作 工作 工作 工作 工作 工作 工	Nigreda.	Dry buth at 19	Wet bulb at 16	Vapour ton-ron	Daw point at 10 a.m.	Humidity at 10	Painfall, rast 74 &
41	20th 21st 22nd 23nd 24th 24th	22 1		84.9 87.8 89.8 91.9 83.4 81.4 90.4	89-5 95-0 97-0 100-0 89-0 96-0 90-5	9 2 15-4 14-5 17-2 11-2 23-2 18-2	80 8 79 6 82 5 77 8 77 8 70 8 81 3	87 1 68 6 92 5 91 6 81 8 85 6 92 6	81-5 88-6 84-5 70-5 78-5 82-5	1:001 1:050 1:007 1:007 1:009 1:009 1:009 1:009 1:009	79/03 81/6 81/2 82/9 77/0 76/3 78/5	78 80 89 67 70 70 70 61	0·1
f91'	he mea	n 10 <i>a</i>		pressu	re of th	1 0 8 070	n days					Inches. 29:538	

			Inches.
The mean 10 A.M. pressure of the seven days			29:538
The mean temperature of the seven days. The extreme variation of temperature. The maximum temperature			87·4 27·2
·	1	***	100-0
The mean 10 A.M. relative humidity of the se	ν	- > +	74 Inch-n.
The total fall of rain from 19th to 25th June	1898	201	0.75

The daily mean temperatures are the crude means of maximum and minimum temperatures.

REPOROLOGICAL OFFICE, BENGAL,

G. W. KUCHLER,

The 27th June 1838.

Offg. Metaari logical Reporter to the Goot, of Bongal,

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengat classed as Major Works for the munic of April 1898, as compared with that of the corresponding month of the precious year.

	2	GLL.	AGE,	1898-99			Т	orr.	AGE,	1897-98		
CANALS.	During		.6	To end		he	During mon		le e	To end	of t	lie
1	. 2			3			4			5		
Orissa Cirole.	Rs.	A.	P	Rs.	A.	P.	Re.	A.	₽.	Rs.	Á.	P.
Malilanda Canal System	0,990	2	11	6,990	2	11	3,049	4	4	3,049	4	4
Taldanda Canal System Kendrapara ditto	2,788	ĩ	4	2,788	1	4	9,207		5	9,207		å
	3,200	8	9	3,200	8	9	2,203		0	2,203	14	0
High Level Canal, Range I	543	_	9	543	14	9	298	1	G	298	1	6
	267		6	267	13	6	75	14	6	75	14	6
Ditto, " III Jajpur Canal		11	9	21	11	9	26	12	6		12	6
Total Orissa Circle	13,813	5	0	13,812	5	0	14,861	9	3	14,861	9	3
South- Western Circle.												
Midnapore Canal	6,000	8	9	6,000	3	9	8,439		6	8,439	-7	6
Hijili Tidal Canal	10,236		8	10,236		9	9,973	9	0	9,973	9	U
Total South-Western												
Cirole	16,236	14	6	16,236	14	6	18,413	0	6	18,413	()	Б
Sone Circle.				4.040		*	0.000	10		0.000	10	6
Patna Canal System	4,942		6	4,942	1	6	2,862		0	2,862		[]
Arrah ditto	3,257	3	9	3,257		9	3,587		9	3,587		9
Buxar ditto	52	15	6	52	15	6	1,256	0	0	1,256	,U	U
Total Sone Circle	8,252	4	9	8,252	4	9	7,706	2	9	7,706	2	9
GRAND TOTAL	38,801	8	8	38,301	8	3	40,980	12	6	40,980	12	6

Government Transport Service.

			%=						The Control of the Control	Section 10		
			TOLL411		υ.				Total	B. 1897-9	6.	
	Du	ring th	e month.	To-	ond of th	e month.	D	uring th	e month.	Toet	of of the	month,
CANAL	ri ri		É	d.		#	2		å į	ė l		Ė
	Parajenger	Goods	Total ceipta.	Passenge	Goods.	Total cripta.	1'asshoger	Coode,	Total cepta.	Pramerage	Goods	7
1	2	3	4	8	8	7	8	0	30	п	15	13
Origan Circle.	N⊕. 4,087	Mdn.	Ra, A, P. 8,617 4 5	No. 4,087	M ds.,				Rm. 4. 2. 3,758 8 8	No. 4,200	M.ds. 2,491	Ec. A. P. 8,755 S S
Total Orless Circle	6,087	504	8,517 4 B	4,087	504	3,517 4 5	4,209	3,431	8,784 8 B	4,909	3,431	3,768 à â

Assessed Tallage Receipts.

		EARNINGS	, 1898-99.	EARNINGS, 1897-98.					
Canals.		During the month.	To end of the month.	During the month.	To end of the month.				
1		2	3	4	5				
Orissa Canais Midnapore Canal Hijili Tidal Canal Sone Canais	***	Rs. A. P. 17,329 9 5 6,000 3 9 10,236 10 9 8,252 4 9 41,818 12 8	Rs. A. P. 17,329 9 5 6,000 3 9 10,236 10 9 8,252 4 9 41,818 12 8	Rs. A. P. 18,620 1 11 8,439 7 6 9,973 9 0 7,706 2 9 44,739 5 2	Rs. A. F. 18,620 1 11 8,439 7 6 9,973 9 0 7,706 2 9 44,739 5 2				

OALGUTTA,

The 28th June 1898.

Under-Secy. to the Goot. of Bengel.

IRRIGATION DEPARTMENT, BENGAL.

Abdract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of April 1898, as compared with that of the corresponding month of the previous year.

Total 23,543 10 3 23,543 10 3 24,075 3 6 24,075 3 Orissa Coast Canal 8,881 2 0 8,881 2 0 7,215 5 3 7,215 5 Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11			- 1	Polit	AGE	, 1898-99),		Į.	l'ori	,AGB	, 1897-98	3,	
Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. Calcutta and Eastern Canals 19,901 13 6 19,901 13 6 19,328 11 3 19,328 11 70lly's Nala 3,641 12 9 3,641 12 9 4,740 8 3 4,746 8 Total 23,543 10 3 23,543 10 3 24,075 3 6 24,075 3 Orissa Coast Canal 8,881 2 0 8,881 2 0 7,215 5 3 7,215 5 Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11	Canals.		Durin mor	g th	в			the			.0			the
Calcutta and Canals Eastern Canals 19,901 13 6 3,641 12 9 19,901 13 6 3,641 12 9 19,328 11 3 4,746 8 8 19,328 11 3 4,746 8 8 19,328 11 3 4,746 8 8 Total 23,543 10 3 23,543 10 3 24,075 3 6 24,075 3 24,075 3 6 24,075 3 Orissa Coast Canal 8,881 2 0 8,881 2 0 7,215 5 3 7,215 5 Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11	1		2	?		8			4	ł		į į		
Canals 19,901 13 6 3,641 12 9 19,901 13 6 4,740 8 3 19,328 11 3 4,746 8 3 19,328 11 4,746 8 3 Total 23,543 10 3 23,543 10 3 24,075 3 6 24,075 3 Orissa Coast Canal 8,881 2 0 8,881 2 0 7,215 5 3 7,215 5 Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11			Rs.	A.	P.	Rs.	Α.	P.	Ra.	Α.	P.	Rs.	Δ.	P.
Orissa Coast Canal 8,881 2 0 8,881 2 0 7,215 5 3 7,215 5 Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11	Canals							-				· ·		8
Nadia Rivers 4,381 9 6 4,381 9 6 3,219 11 6 3,219 11	Total	104	28,543	10	3	23,543	10	3	24,075	3	6	24,075	3	6
N 77	Orisea Coast Canal	484	8,881	2	0	8,881	2	0	7,215	5	3	7,215	5	8
GRAND TOTAL 36,806 5 9 36,806 5 9 34,510 4 3 34,510 4	Nadia Rivers	200	4,381	9	6	4,381	9	6	3,219	11	6	3,219	11	б
	GEARD TOTAL	101	36,806	5	9	36,806	5	9	34,510	4	3	34,510	4	8

CALGUTTA, The 28th June 1898.

T. H. CLOWES, Under-Secy, to the Goot, of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 25th June 1898, as compared with the corresponding week of the previous year.

NATURE	· F DARGO.		Werk as	nthe Siter n June 1886,	MY, 723	Ware an	ding Saturn 15 June 1897,	AY, THE
			Number of bonts.	Weight of cargo,	Tollage.	Number of bosts,	Weight of Cargo.	Tollare.
			No.	Mda.	Rs.	No.	Mds.	Rs.
thee and pandy Jule Phrewood Other articles	40° 50°	+11 HB+ *P+	143 8 50 420	16,445 6,150 38,325 1,19,282	209 78 581 1,493	144 15 66 698	42,490 7,325 69,126 1,81,015	676 128 916 2,288
	Total	88+	621	1,80,202	2,355	. 823	2,89,966	3,908

William Brown British to

Weekly Return of Traffic Receipts on Indian Sailways.

EAST INDIAN RAILWAY.

Approximate Return of Trafks for week ended 11th June 1808 on 1,705.09 miles open

	Number of passengers.	G TRAPPIC. Coaching receipts.			Other eachings continued).	Total earnings,	1	TRAIN-MILTOR AND MOTORNAL TO
:		Ba. A. P.	Mine. n.	Bu. A. e.	Bio. Acr.	Ha, A. P.		
Countratio for the week	348,985*	8,16,674 19 0° (85 1) 7	43,52,546 30	7,88,541 0.0 450 8.6		11,23,013 14 0 650 2 5		177,916 WA
For previous 224 weeks of half-	7,599,80%	79,94,639 в 0	0,55,61,031 20	1,95,14,084 2.0	4,05,761 0 0	2,70,04,475 7 0	5,070,1875	3,783,000 1003
Total for \$3) weeks	7,985,490	83,11,305 1 0	19,29,13,500 0	2,01,04,028 ¥ 6	5,22,436 0 0	2,90,28,390 8 0	2,109,5982	3,0.0,9151 630
GOMPARISON.							L i	-
Total for corresponding week of previous year. Per mile of radway corresponds.	331,335	2,91,287 18 1	48,00,000 20	8,34,536 15 6	22,869 16 9	11,47,980 10 8	87,001	159,870
ing work of previous year	100111	171 2 7		490 1 2	13 2 3	674 8 0	100.00	es s.
Total for corresponding 231	7,422,627	75,38,182 18 8	0,73,87,061 30	2,00,43,157 13 4	3,18,036 7 9	2,50,97,927 6 6	2,107,913	8,60m,966 4,750,0

[&]quot; The increase is in outward tradic,

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 11th June 1898 on 2823 miles open.

	::- <u></u> '						-						Transport of the Control		1100
	Congress	TEAFFIC.	MERCHANDIS	SEA		ta 45							TRAFFIC	Takin-night	a non-
			uiger and					Other par [mailtent]	mitor rdi.	fotal en	re io	nçii .			
rai	Number of panishees.	Cosching recurpts.	Westlit outried.	1	Жеомр	18.		,	7177				Conching.	Merchan !	Treat.
		Bas As P	Мри, с	D	Res	Ä- I	P.	Ru.	A. 1	Re,	A.	P.			
Total traffic for the week	19,490*	4,407 6 0° 200 16 4	12,852 3	9	614 #J	8 0 9 3			8 1		11 10		1,108	F8	£30
For previous 22) weeks of half-	885,467	1,51,122 14 0	3,65,919 9	0	14,637	2 0		219	0	1,08,178	0	II-	\$4,663	9,460	27,111
Total for 28} works	804,057	1,55,500 4 0	3,78,7515	0	15,351	7 0	-	231.	0	1,71,178	11	0	25,771	11,883	9,5
COMPARISON.							İ								
Total for corresponding week	26,661	0,944 10 0	18,359	ė .	7 EO	8 0)	12	8 1	7,716	0	Ó	1,081	101	1.1
ting week of previous year	.+1	312 4 4	*144**		31	2 5	H	9	6 1	847	1	7	11141-	P+1+++	6
Total for corresponding 239	6100,383	1,40,044 11 0	4,25,231	0	16,479	12 0	ļ	149	14 (1,02,788	5	D	85,733	1,163	

^{*} The decrease is due to " Dashaharu" bathing festival in 1892,

BENGAL AND NORTH-WESTERN BAILWAY.

(INCLUDES TIRBUT STATE RAILWAY.)

Approximate Beturn of Traffic for the week ending 11th June 1898 on 902" miles open.

	COLUMN	THAPPIC		и драм Мергикал. Врес,	Other earnings			Tager and
	Number of passingers,]	Receipts.	Weight carried.	Receipts.	Including	Tatalearnings.	Onaching	Moroban- dise.
		Ra.	Nps.	Bs.	Re.	Ra		
total traffic for the week on 9020 total traffic for the week on 9020 total traffic for the week on 9020 total traffic for the week on 9020 total traffic for the week on 9020 total traffic for the week on 9020	185,840 180°38	(a) 52,000 57:75	5,05,780 580°70	(6)68,800 74'17	17,850 1977	(a) 1,50,890 Co 161	20,384	(c)\$4,050
represents 22) weeks of half-	9,730,871	11,37,995	1.18,40,570	16,47,479	5,42,443	81, 27, 939	634,727	\$18,263
Total for 35) weeks	2,263,611	11,90,056	1,23,55,320	17,14,379	3,60,295	83.64,759	455,211	\$67,810 ⁶
cont for corresponding week of previous year on \$15 miles open or miles of miles open or may seek of previous year of previous year of corresponding date	213,513 159-03	· 45,135	0,81,146 705*89	76-14	20,635 36:56	1,28,020 154:03	16,429	(#)\$5,513
* The mileage given here is to (a) Increase due to no spe (b) Decrease in which is (c) Incredes 1,085 wites of (d) and ded lign (a) 1,286 miles of (d) 1,286 miles of	of the come in to	eight is due to ran on open lis emling 16th Ay	longer lead, and 1898,	14,29,833	4,58,108	30, 28, 100		1885.

BASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Behar Sections.)

Approximate Beturn of Traffic and Mileage for the week ended 19th June 1898 on 818 miles

	Colonia	6 TRAPPIC.	MURCHANDIS	MAND HINERAL		MP 1036 9# 8T	o manor op	71 ,	
	Number of passonsers.	Coaching receipts.	Weight carried.	Receipts.	Other estumps (including forry).	Total	Cosching.	Merchan.	Total
		Es. A. P.	MD4, a.	Ba, A, P,	Re. A. P.	Ra, A. P.		dine.	
Total treffic for the week the per main of rations of half-	178,480 218 4,796,448	53.950 0 0 102 0 0	786,150 0 836 0	1,03,880 0 0 190 0 0	6,240 0 0 2 U 0	1,95,400 0 0 \$230 0 0	31,200	34,481	65,68
Total for 24 weeks Companies.	4,976,929	\$4,54,206 0 0 \$3,37,526 0 0	2,04,77,744 0 3,11,85,394 0	38,78,997 0 0	3,63,647 0 0 3,60,997 0 0	80,91,749 0 0 92,94,149 0 0	770,634 807,834	818,572 : 851,053	1,535,30
tor corresponding period.	109,137	60,860 0 0	6,84,652 0	74,943 9 6	4,085 0 p	1,45,887 0 0	26,913		
to corresponding date of persons fear	4,803,325	81 0 0 34,84,975 0 0	841 0 8,08,73,877 0	99 0 0	4 0 0	177 O 0	909,800	811,808	40,597 1,614,10

^{*} Audited up to 80th April 1808. † Backuding steam-boat earnings.

DACCA STATE RAILWAY.

Approximate Return of Traffic and Mileagon in the week ended 18th Jane 1898 on 86 miles upon

	COACRIN	G TEAPPI	c.	MBRORATE	HAP:	PIC.	BRAL					TRAPPIC	THAIR-MIL	de rog
	Number of passengers.	Cone): reeng		Weight carried.		Bacetp	tm.	Otheren	rtings	Tot.		Coaching.	Merchan.	Total
		Ba.	A. F.	Mps.	В.	Ra.	A. P.	Ro.	A. P.	11.	_			
on traffic for the week	90,916 248 572,854	6,950 81 1,74,168	0.0	21,870 254 8,41,374	0	1,840 21	0 0	140	D 0			2,644	1,016	4,58
Total for 24 weeks	523,564	1,81,098	0 0	8,63,244	0	82,931	0 0	4,754		2,08,773			44,299	102,12
COMPARISON,											_		13/200	106,71
al fer corresponding wook previous year mile of rail way corresponding rek of provious year	15,290	3,820	0 0	12,290	0	023	0 0	177	0 0	4,690	0 0	2,940	1,006	8,94
to corresponding date of	189	45	0 0	. 143	0	8	0.0	2	0 0	5.5	0 0			9,09
move year	409,833	1,50,882	0 0	7,88,191	ы	61,337	, 0	4,610	0 0	2,16,829			19,625	91,18

[&]quot; And ted up to 30th April 1898,

ASSAM-BENGAL RAILWAY.

Approximate Return of Traffic for the Wesk ended 18th June 1898 on 296 will

	Оолент	O TRAFFIC.	MERCHANDISE TRAI	AND MINERAL	Orber en minn		TRABBIC	Train-mile	B RTM.
	Number of passengers.	Ocaching receipts.	Waight carried.	Moosipts.	Other earnings (ustimated).	Total carnings.	Coaching.	Merchan-	Totale
a traffic for the week	&O 11b	168. A. P.		Ed. A. P.	Ra. 4. P.	He, A, P,			
Merious 21 weeks of half-	23,147 80°P3	13,431 D D 46.96	2,23,593 6 781 76	9,90d D 0	80% 0 0 1'08	23,640 0 0 89,66	3,170	5,158 18:03	8,33, Ri 1
Potal for 24 weeks	612,167	3,66,063 0 0 3,79,494 0 0	54,65,467 @	9,08,023 0 0	(4,720 D g	5,63,808 0 0	71,637	107,170	179,81
Comparison,	VOI , 100	0,10,296 (1 ()	86,59,050 0	2,12,828 0 D	15,023 0 0	6,07,440 0 0	74,807	119,334	187,10
for corresponding week of						j			
liked rall any correspond.	14,809	7,977 0 0	91,484 0	4,747 0 0	795 0 0	12,010 0 0	2,770	2,380	
he or pravious year to of them year	P1:81	46140	675-97	20/25	5.00	81788	17:40		5,600
111 111 411	487,630	2,70,046 0 0	40,88,950 D	1,10,085 0 0	12,107 # #	4,00,188 0 0	88,182	14'08	159,579

[.] Includes audited Brares for work ending 14th May 1819.

FINANCIAL YEAR.

Approximate Statemen

700		-		be emembed t	20 ED E (6.136 G)	us úl. O	ross Receipts	of the			lway.			
Tine	tire Jone wash	Badipo	RROBET	TO POR WRIER	EXPENS	Tora	L RECEIPTS PROPERTY IN THE SECOND 1868.	om ler ITA	Tora	L RECEIPTS YE BLL 1897 TO 10 JUNE 1807.	out lar	Total	Total	-∓' .: .
Parket Present	Procipis,	Worked.	Mean nulsuse worked.	Receipts.	Per mile worker.	Mean udlonge worked.	Total recoipts.		Mean mileage worked	Total receipts.	J'or mule worked per perk.	increase la 1820.	decrease in	
100	23,640	Ra. Spring	150	Re, 12,910	12a. 81°35	286	Es. 2,74,748		150	Ro. 1,31, 150	>>4mp>	Rs. 58,643	HERM	Ağ

DARJE	ELING-	RIMAL	AYAN A.	ALLWAY	COMPAN	Y, LIMIT	FED.			
Approximate Correspondin	earning g period	for the	wook endi	ing 18th J	ane 1898	161	Apr.	Ra. 11,554 6,567	0	2. 0 0
In	Orease	954	810	she	200	060	-	4,987	0	0
Receipts per Ditto for	mile fo	or the w	eek endin	18th Jur 1897	1993		201 000		8 19	9 8
In	GSOLING	401	100	999	e\$1	***	*1*	97	12,	6
Receipts from	m let Je r the con	muary t	a 18th Jui	d 1897	464	=	894 892	3,15,985 3,28,096	0	00
De	OCCUPATION OF	464	001	•	-	-	" die	19,110	0	0



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, JANUARY 5, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARTNERS-No. 247,

[First Publication.]

EASTERN ARCHIPELAGO -STRAIT OF MARASSAE.

(1) Pulo Lant strait-Rock south-eastward of Sunngi island.

The British Admiralty has given notice (No. 726 of 1897) of the existence of a rock, which dries at half tide, or about 3 feet, and is about two-tentls of a cable in length cast and west, situated with the tree on the south-east end of Suangi Island hearing N. 47° W., distant 8 cables; and entrance of Scharu river N. 38° E.

Approximate position, lat. 3° 27′ 55″ S., long. 116° 1′ 40″ E.

(2) Amended particulars of Hercules Reef, Ares Bunk, &c.

Also that-

- (a) Heroules reef, in approximately lat. 2° 22% S., long 116° 43° E., partly dries at low water.
 - A rook, with a depth of 16 feet on if, and about a cable in diameter is situated N. 20° E., distant 210 cables, from Hercules reof; and there are depths of 8 fathoms in a S.S.W. direction for about 14 cables from that reef, in other directions the soundings around Hercules reef are 12 to 19 fatherns.
- (b) Ares bank, eastward of Ares or Aru point, is reported to be situated 2 miles westward of the position in which it has hitherto been shown, and a note to that effect has been placed on the chart.

The beacon on this bank is surmounted by a white ball, and situated approximately in lat. 2° 15′ 15″ S., long. 116° 39′ 30″ E.

- (c) A rocky patch, now named September reef, consisting of sand, coral, and stones dries over a length of about 2 cables in a N. by E. and S. by W. direction, and is about a cable in breadth. It is situated in approximately lat. 2° 17' 10° S., long. 116° 48′ 10° E.
 - A rocky patch, of considerable extent, with a depth of 15 feet on it, is situated with its centre 8.54° W., distant 34 cables, from September reef; and there are other patches with depths of 5 to 6 fathoms on them, extending about a mile and a quarter southward, and nearly a mile northward and north-westward from September reef; the general depths around being 11 to 20 fathoms.
- (d) A rock which dries, with depths of 4 fathous around, is situated in approximately lat. 2° 21′ 50″ S., long. 116° 36′ 40″ E.; a rock, with a depth of 2 feet on it, in lat. 2° 24′ 50″ S., long. 116° 35′ 0″ E.; and a rock, with a depth of 4 feet on it, and depths of 2 fathous around, in lat. 2° 27′ 20″ S., long. 116° 34′ 5″ E.

(Variation 2º Easterly in 1897.)

B. P. Caragh, Countr., a.t.M., Port Officer of Calculta,

Published for general information.

CALCUTTA, the 31st December 1897.

T II. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 249.

[First Publication.]

AFRICA, EAST COAST—ZANZIBAR ISLAND.

Ras Nungice light regularly exhibited.

The British Admiralty has given notice (No. 727 of 1897) that the light on Ras Nungwe (revolving every half minute and other particulars as given at No. 52, List of Lights, part VI., 1897) is now regularly exhibited, and the word "occasional" against the light on the charts; and the remark on page 1 in Light List, part VI., should consequently be expunged.

Approximate position, lat. 5° 43' 5" S., long. 39° 18' 5" E.

B. P. OREAGH, Comdr., R.LM. Port Officer of Calcutta.

Published for general information,

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 249.

[First Publication.]

CHINA, EAST COAST-YANG THE KIANG ENTRANCE.

Alteration in position of Farrway buoy.

THE British Admiralty has given notice (No. 729 of 1897) that, in consequence of the recent movement of the South-east spit, Tung sha banks, to the south-westward, the fairway buoy (bell, red and black horizontal stripes) at the entrance of the South channel of the Yang tse kiang has been moved one mile to the southward, and is now moored with Tung sha light-vessel bearing N. 54° W., or approximately in lat. 31° 3′ 30″ N., long. 122° 9′ 0° E.

B. P. Cheagh, Comdr., n.1.m., Port Officer of Calcutta.

Published for general information.

T. H. Chowes

Under-Secretary, Marine Department.

CALCUTTA, the 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 250.

[First Publication.]

AUSTRALIA, EAST-New Caledonia.

Port Burai - Exhibition of lights.

The British Admiralty has given notice (No. 737 of 1897) that, on 14th February 1897, two leading lights were exhibited at port Burai:—

(1) The front light is a fixed red light, elevated 29 feet above the sen, visible about 10 miles in clear weather and shown between two iron posts, situated on the point at the east side of the northern entrance to Nera (Mero) river, in a position bearing N. 65° E., distant 176 cables, from Buctaué rock.

Approximate position on Plan No. 1307, lat. 21° 36′ 45″ S., long. 165° 27′ 15″ E.

(2) The rear light is a fixed white light, elevated 56 feet above the sea, visible about 10 miles in clear weather, and shown between two iron poets, situated N. 18° E., distant 505 feet from the front light.

Note.—The above lights in line, bearing N. 18° E., lead in the channel from about 4 miles seaward to the anchorage.

(8) Also, that a fixed green light, elevated 6 feet above the sea, and visible from N 68° E., through east, to S. 52° E. (over the anchorage), about 4 miles in clear weather, is shown from a shed situated N. 15° E., distant 165 yards, from the point on the northern side of the southern entrance to Nera river. (Variation 10° Easterly in 1897.)

> B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

OALGUETA, the Slat December 1897.

NOTICE TO MARINERS-No. 251.

[First Publication.]

CHINA SEA-HAINAN ISLAND.

Shoal S.S.E. of South-west point.

The British Admiralty has given notice (No. 738 of 1897) of the existence of a shoal of sand, about a mile in extent east and west, with a depth of 4% fathoms on it, situated in a position with Snake point bearing N.E. by E. & E., distant 13 miles; and South-west point N.N.W. & W.

Approximate position, lat. 18° 17' N., long. 108° 471' E. (Variation 2° Easterly in 1897.)

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calculta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Departs ent.

CALGUTTA, the Slat December 1897.

GOVERNMENT OF SENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 252.

[First Publication.] AFRICA, EAST-SOCOTRA.

Coral patch reported eastward of the Brothers.

The British Admiralty has given notice (No. 739 of 1897) that information has been received that the Master of the German steam-vessel Hertha reports that, on 4th November 1897, when in a position with the centre of Jezirat Darsa bearing W. § S.; and the bluff of Res Kattanahan N W. § W.; or approximately in lat. 12° 8′ N., long. 53° 50 § E., he saw a coral patch, about 100 feet long, with apparently depths of 3 to 4 feet on it.

The symbol for a rock with less than 6 feet water on it, with the words "Hertha 1897" written against it, has been placed on the Admiralty Charts in the above position.

(Variation 2° Westerly in 1897.)

(Variation 2º Westerly in 1897.)

B. P. CREAGE, Comdr., N.I.M., Port Officer of Calcutta.

Published for general information.

Calmerta, the 31st December 1897.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 1.

[First Publication.]

BAY OF BENGAL-HOOGHLY BIYER.

Caution .- Portion of a dhow awash.

The Master of the S.S. Senator reports having passed a portion of a dhow awash S. 25° true, 350 miles from Eastern Channel light. The wreck is dangerous to shipping. W. true, 350 miles from Eastern Channel light.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.
T. H. Chowns,

Calcorra, the 3rd January 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 243.

[Second Publication.]

BAY OF BENGAL-BURMA COAST.

Further postponement of the 12-mils light on Spit light-ressel.

Wrru reference to Notice to Mariners No. 227, dated the 22nd November last, issued by this office, a telegraphic communication (No. 403 of 1897) has been received from the Port Officer, Rangoon, intimating that the exhibition of the 12-mile light on board the Spit light-read, Rangoon river, has been further postponed to 20th January next.

B. P. Cumbit, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.
T. H. CLOWES,

Calcures, the 27th December 1897.

Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 244. [Second Publication.]

BAY OF BENGAL-BURMA COAST.

Temporary relieving of Baragua flats light-vessel postponed.

With reference to Notice to Mariners No. 288, dated the 14th instant, issued by this office, a telegraphic communication (No. 405 of 1897) has been received from the Port Officer, Rangoon, intimating that the temporary relieving of the Barague flats light-vessel has been postponed to the end of January next.

B P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 27th Decamber 1897.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 245.

[Second Publication]

EASTERN ARCHIPELAGO-MAKABAR STRAIT.

Pulo Laut strait-Buoys and beacons placed, rock found.

THE British Admiralty has given notice (No. 716 of 1897) that the undermentioned buoys and beacons have been placed in Pulo Laut strait:-

1. A conical buoy, No 1, pointed black and marked S.L., moored in a depth of 4 fathoms at low water springs, at the south end of Keramat bank, in a position with tree on south-cast part of Suangi island bearing N. 12° E. distant 6 a miles; and mount Jambangan (1621) S. 76° E.

Approximate position, lat. 3° 33′ 40″ S., long. 115° 59′ 30° E.

2. A conical buoy, No. 2, painted black and marked S.L., moored in a depth of 4 fathoms at low water springs, at the north oud of Keramat bank, in a position with tree on Suangi island bearing N. 10° E., distant 33 miles; and centre of Salino N. 87° E.

3. A conical buoy, No. 3, painted black and marked S.L., moored in a depth of 22 feet at low water springs, southward of Pampakan island, in a position with tree on Suangi bearing S. 26° W., distant 3½ miles; and centre of islet eastward of Burung island N. 67° W.

4. A white beacon, surmounted by a ball, on the northern side of the rock which dries, a mile north-north-wost of Selukutan, in a position with tree on Sungibearing S. 31° W., distant 5% miles; and north point of Pampakan island W. N. 48°

5. A black beacon, surmounted by a triangle, in a depth of one foot at low water springs at the south end of Gusong Payung, in a position with the southern rock on that shoal bearing N. 35° E., distant 6 cables; and north point of Pampakan N. 87° W

6. A black beacon, surmounted by a triangle, at the north end of Gusong Payung, in a position with the southern rock of that shoal bearing S. 20° W., distant 1-70 miles; and islet at mouth of Dua river S. 77° W.

Also, of the existence of a rock, with a depth of 9 feet on it at low water, on the east side of Suangi island, in position with the tree on that island bearing 8.43° W., distant one mile; and northern point of islet eastward of Suangi N. 60° W.

(Variation 2° Easterly in 1897.)

B. P. Caragu, Comdr., L.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 27th December 1897.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 246.

[Second Publication.]

INDIA, WEST COAST-GULF OF KUTCH.

Light on Rojhi (Rozi) re-exhibited.

Wirm reference to Notice to Mariners No. 206, dated 28th October last, issued by this office, the British Admiralty has given further notice (No. 719 of 1897) that on 1st October 1897, Rojhi (Rozi) light (fixed white, and other particulars presumed to be as given in List of Lights, part VI., 1897, No. 94) was re-exhibited.

Approximate position, lat. 22° 32′ 45" N., long. 70° 1′ 30" E.

B. P. CREAGH, Comdr., R.L.R.

Port Officer of Calcutta.

Published for general information.

OALTOTTA, the 27th December 1897.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 238.

[Third Publication,]

BAY OF BENGAL-BURNA COAST.

Baragua fluts light-vessel temporarity relieved.

The Port Officer, Rangoon, has given notice, by telegraphic communication No. 389 dated 8th December 1897, that Baragua flats light-vessel will be temporarily relieved about the 5th January next. There will be no change in the character of the light, but the relieving light-vessel will have three masts.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Quientto.

Published for general information.

T. II. CLOWES, Under-S c-ctary, Marine Department.

Calgeria, the 14th December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 239

[Third Publication.]

OHINA, EAST COAST-YUNG RIVER.

Obstructions at entrance removed.

With reference to Notice to Mariners No. 207, dated the 29th October 1895, issued by this office, the British Admiralty has given further notice (No. 700 of 1897) that information has been received from Lieutenant and Commander C. J. T. Dormer, H.M.S. Pigmy, that the Harbour Master at Ningpo has given notice that:—The barrier of piles and sunken junks at the entrance of Yung river having been completely removed, the whole channel is now open to navigation. The two buoys which marked the fairway have accordingly been withdrawn. withdrawn.

Approximate position, entrance of Yung river, lat. 29° 58' N., long. 121° 432' E.

B. P. CREAGH, Comile., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcutta, the 17th December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 240.

[Third Publication.]

CHINA, EAST COAST-SULU (MINDORO) SEA.

Sunken rock south-eastward of south end of Palawan.

The British Admiralty has given notice (No. 701 of 1897) that the Master of the steamvessel Moyune reports having struck on a rock, with a depth of about 26 feet on it, situated approximately in lat. 8° 6′ 0″ N., long. 118° 6′ 30″ E.

The symbol for a rock with less than 6 feet water on it, with "Moyune 1897" written assing it.

against it, has been placed on the Charts in the above position,

B. P. CREAGH, Condr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWSE. Under-Secretary, Marine Department.

Calourta, the 17th December 1897.

NOTICE TO MARINERS-No. 241.

[Third Publication.]

CHINA.

Typhoon and Storm warnings.

Notice to Mariners No. 704 of 1897, issued by the British Admiralty, is republished.—
The Chinese Government has given Notice, dated 15th July 1897, that the undermentioned signals of the International Code will be shown, as typhoon and storm warnings, at the semaphores of the ports receiving telegraphic warnings of typhoons or storms, on and after 1st January 1898:—

The letter V added to a typhoon signal signifies that the centre is in the immediate vicinity of the place indicated by the Cone:—

```
Typhoons.
                                      Signification.
Number of Signal.
                             Typhcon to S.E. of Luzon.
        10
                                        to B
         11
                       ...
                                        t. S.W. ,
         12
                       ...
                                        to E.
         18
                       1 - 4
                                 99
                                        over central Luzon.
         14
                                 9.1
                                        to W. of Luzon.
         15
                       ...
                                        to N.E.
         16
                       ...
                                        to N.
to N.W.
         17
                       ...
                                 93
         18
                       6.00
                                 19
                                        over northern Luzon.
         19
                       ...
                                 51
         20
                                        to S E. of the Paracels.
                       ...
                                        to B.
         21
                       4 8 1
                                        to S.W. ,
         22
                       ...
         23
                                        to E.
                                        over centre of the Paracels.
                       ...
         24
                        •••
                                         to W.
         25
                        ...
         26
                                         to N.E.
                        ---
                                         to N.
         27
                       ...
                                                       37
                                        to NW.
         28
                                        in the gulf of Tong King.
                                 19
         29
                       104
                                 33
                                         to S.E. of Hongkong.
         80
                       ...
                                        to 8
         81
                       100
                                 25
                                        to S. W.
         32
                       844
                                 22
         33
                                        to E.
                       ...
                                                            13
         84
                                         near
                       ...
                                 53
                                         to W.
         35
                        ...
                                                            2.0
         36
                                         to N.E.
                        -94
                                                            to N.
         37
                                        to N.W.
         88
                                         to S. of Formosa.
         39
                                         to S.W.
         40
                        . . -
                                 33
                                         to E.
         41
                        . . .
                                 11
                                         over central Formosa.
         42
                        * * *
                                 31
                                        in the central part of Formesa channel, to the North of Formesa channel.
         43
                        P 4 1
                                 33
         44
                        - - -
                                 55
                                         on land near Swatow.
         45
                       447
                                 19
         46
                                         on land near Amoy.
                        ...
                                 13
                                                        Fuchau.
         47
                        ...
                                 55
                                         to N.E of Formesa.
         48
                        . . .
         49
                                         to N.
                        ***
                                  13
                                         to North of Formess channel.
         50
                        ...
         51
                                         to S.E. of the Liu Kiu islands.
                        ...
         52
                                         to E.
                                      to E. over the centre of the Liu Kiu islands. to W. of the Liu Kiu islands. to S. of Japan. to S. of Van Diemen strait. over the S. W. of Japan.
                        ...
         53
                        ...
         54
         55
          56
                        ...
         57
                        ...
          58
                                         S.E. of Ningpo. .
                        * * 1
                                  99
          59
                                         to 8.
                        440
                                                       19
                                         to S. W.
          60
                        . . .
                                                       á9
          61
                                         to E.
                        . . .
                                  93
                                                       91
                                         to W.
                        ...
```

Typhoons-concld. Number of Signal. Signification. 63 Typhoon to S.E. of Shanghai. to S. W. 64 65 ... 66 to E. Hear Shanghai. to W. of " 224 67 . . . 59 68 ... 9.1 59 69 to N.E. 33 70 to N. to N.W. . --93 71 72 ... to N.W. ,, or depression to E. of Shantung. 98 ... 91 73 74 ... over 12 to W. ... 21 75 76 to N.E. 13 12 to N. 11 79 to N.W. 77 ... 13 78 ever Korea, ... 91 21 79 ... Manchuria 11 77 39 80 * = 4 Mongolia. 91 33 81 ... 99 Sitieria. 99 99 82 " Central China. ... 93 88 ... Western Uhina. 73 99 84 in the valley of the Yang tse king in the Yellow sea. . . . 99 85 ... 99 99 86 over the S.W. of Japan. 77 87 to the S. of the sea of Japan. 33 91 88 ... traversing Japan. tends to fill up. N. 39 91 89 13 19 90 31 91 is going North. 11 92 N.E. JF. 22 93 Ē. 94 S.E. 22 99 95 ... 39 8. 37 96 S.W. ... 99 97 - + + W. 98 N.W. ... 99 ... is stationary. direction unknown.

Storm or Gale warnings.

Storms or gales will be signalled by the letter G, followed by two figures and one or several letters, according to the undermentioned arrangement:—

The figures indicate the directions from which the gale is expected :-

02	stands	for N.N.E.		18 sta	anda for S.S.W	7.
04		N.E.		20	. 8.W.	
06	31	E.N.E.	6	22	, W.S.V	W.
08	21	E.		24	337	
10	9-	E.S E.		26	NO N	
- 12	11	B.E.		24	N.W.	
14		B.S.E.		30		**
16	12	R			" N.N.Y	W.
	31	1021		32	. N.	

The letters indicate approximately the places threatened with a gale :-

C stands for Shautung and north coast of China.

M. the estuary of the Yang tee king, the Chusans, &c. F the Formosa channel.

the neighbourhood of the Liu Kiu islands. the south coast of China and the China ca. Kiusiu and the S.W. coasts of Japan. $\bar{\mathbf{Q}}$ KW

the sea of Japan, Korea, and the west coast of Japan. the coasts of Japan bordering the Pacific ocean.

This Notice affects the China Sea Directory, vol. III, 1894, page 17.

B. P. OBEAGH, Comdr., B.t.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 17th December 1897.

T. H. CLOWES. Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 242.

[Third Publication.] JAPAN-TOUGARD STRAIT.

Ohata bay-Rocky bank west-south-west of Shiriya saki.

THE British Admiralty has given notice (No. 708 of 1897) that a sounding of 64 fathoms, hard bottom (but there may be less water), with deep water close to, was obtained in a position with Shiriya saki lighthouse bearing N. 68° E., distant 675 miles; and Red diff N. 58° W.

Approximate position, lat. 41° 23′ 0" N., long. 141° 20′ 10" E.

The words "probably less water" have been written against the 6s fathoms which has been placed in the above position on the Admiralty Chart.

(Variation 5° Westerly in 1897.)

B. P. CREAGE, R.I.M., Port Officer of Calcutte,

Published for general information.

CALOUTTA, the 17th December 1897.

T. H. Clowes, Under-Secretary, Marine Department,



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, JANUARY 12, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 2. [First Publication.]

NEW ZEALAND-NORTH ISLAND.

Sunken wreck north-westward of Table cape.

THE British Admiralty has given notice (No. 744 of 1897) that the wreck of the steamvessel Tasmania lies sunk in a depth of 15 fathoms, with the mastheads just below the surface of the water, in a position with the north-east extreme of Table cape bearing S. E. & S., distant about 376 miles; and point on northern side of entrance to Horaka river S. W.

Approximate position, lat. 89° 2′ 40" 8., long, 177° 59′ 50" E. A marked buoy has been moored to each mast of the wreck, but they should not be relied upon, and vessels should give the vicinity of the wreck a good berth in passing.

(Variation 14° Easterly in 1897.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 8th January 1898.

T. H. Clowes, Under-Secretary, Marine Department

GOVERNMENT OF BENGAL-MARINE DEFARTMENT.

NOTICE TO MARINERS-No. 8.

[First Publication.]

NEW ZEALAND-COOK STRAIT.

North island-Exhibition of cape Palliser light.

Wirm reference to Notice to Mariners No. 182, dated 18th September 1897, issued by this office, the British Admiralty has given further notice (No. 747 of 1897) that on 7th October 1897, cape Palliser light would be exhibited.

Cape Palliser (Ronky point) light is a second order, dioptrie, group flashing white light with a period of thirty seconds; showing two flashes, separated by an interval of three swands, in each group.

It is elevated 258 feet above high water, and visible seaward, over an arc of 214° (or from about E. 1 N., through north and west, to S. W. 2 W.), a distance of 23 miles in clear weather.

The lighthouse, an iron tower, painted white, on a concrete base, is 58 feet high, and 540 feet from high water mark, at an elevation of 210 feet above the sea.

Approximate position, lat. 41° 36′ 45° S., long. 175° 18′ 45° E.

CAUTION.—As the light is visible over Black rocks and part of the point to the northward of them, vossels should not approach within 5 miles of the lighthouse, until the vicinity of those rocks is possed. vicinity of those rooks is passed.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

CALGUITA, the 8th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 4.

[First Publication].

INDIA, WEST-SIND GUAST.

Karachi harbour-Ruoy marking southern limit of port.

The British Admiralty has given notice (No. 762 of 1898) that a conical buoy, painted red, has been moored in a depth of 20 feet at low water spring tides, in a position with the extremity of Manora point breakwater bearing West, distant 83 cables, to mark the southern limit of the port of Karachi.

This buoy will be withdrawn during the South-west monsoon. Approximate position, lat. 24° 47′ 5° N., long: 66° 59′ 16″ E.

(Variation 1º Easterly in 1897).

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutts.

Published for general information.

T. H. Chowes, Under-Secretary, Marine Department.

CALCUSTA, the 8th January 1898

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 247.

[Second Publication]

EASTERN ARCHIPELAGO -STRAIT OF MARASSAR.

(1) Pulo Lawt strait - Rock south-eastward of Suangi island.

The British Admiralty has given notice (No. 726 of 1897) of the existence of a rock, which dries at half tide, or about 3 feet, and is about two-tenths of a cable in length east and west, situated with the tree on the south-east end of Suangi island bearing N. 47° W., distant I cables; and entrance of Selaru river N. 38° E.

Approximate position, lat. 3° 27' 35" S., long. 116° 1' 40" E.

(2) Amended particulars of Hercules Reef, Ares Bank, &c.

Also that-

- (a) Hercules reef, in approximately lat. 2° 22½ S., long. 116° 43′ E., partly dries low water.
 - A rock, with a depth of 16 feet on it, and about a cable in diameter is situated N, 20° E., distant 27° cables, from Hercules reef; and there are depths of 8 fathoms in a S.S.W. direction for about 13 cables from that reef, in other directions the soundings around Hercules reef are 12 to 10 fathoms.
- (b) Ares bank, eastward of Ares or Aru point, is reported to be situated 2 miles westward of the position in which it has hitherto been shown, and a note to that effect has been placed on the chart.

The beacon on this bank is surmounted by ■ white ball, and situated approximately in lat. 2° 15′ 15″ S., long. 116° 39′ 30″ E.

- (c) A rocky patch, now named September roof, consisting of sand, coral, and stones dries over a length of about 2 cables in a N. by E. and S. by W. direction, and is about a cable in breadth. It is situated in approximately lat. 2° 17° 10° S., long. 116° 48′ 10° E.
 - A rocky patch, of considerable extent, with a depth of 15 feet on it, is situated with its centre S. 54° W., distant 3‡ cables, from September reef; and there are other patches with depths of 5 to 6 fathoms on them, extending about a mile and a quarter southward, and nearly a mile northward and north-westward from September reef; the general depths around being 11 to 20 fathoms.
- (d) A rock which dries, with depths of 4 fathoms around, is situated in approximately lat. 2° 21′ 50″ S., long. 116° 36′ 40″ E.; a rock, with a depth of 2 feet on it, in lat. 2° 24′ 50″ S., long. 116° 35′ 0″ E.; and a rock, with a depth of 4 feet on it, and depths of 2 fathoms around, in lat. 2° 27′ 20″ S., long. 116° 34′ 5″ E.

(Variation 2º Easterly in 1897.)

B. P. OREAGH, Comde., E.1.M., Port Officer of Calcutto.

Published for general information,

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 31st December 1897.

NOTICE TO MARINERS-No. 24%.

[Second Publicaion.]

AFRICA, EAST COAST-ZANZIEAR ISLAND.

Ras Nungue light regularly exhibited.

THE British Admiralty has given notice (No. 727 of 1897) that the light on Ras Nungwe (revolving avery half minute and other particulars as given at No. 52, List of Lights, part VI., 1897) is now regularly exhibited, and the word "occasional" against the light on the charts; and the remark on page 19 in Light List, part VI., should consequently be expunged.

Approximate position, lat. 5° 43′ 5° 8., long. 39° 18′ 5″ E.

B. P. CREAGH, Comdr., R.L.M., Port Officer of Calcutta.

Published for general information,

T. H. CLOWES,

Under- Secretary, Marine Department.

CALCUTTA, the 51st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 249.

(Second Publication.)

CHINA, EAST COAST-YANG TSE KIANG ENTRANCE.

Alteration in position of Fairway buoy

THE British Admiralty has given notice (No. 729 of 1897) that, in consequence of the recent movement of the South-east spit, Tung sha banks, to the south-westward, the fairway buoy (bed, red and black horizontal stripes) at the entrance of the South channel of the Yang tse kiang has been moved one mile to the southward, and is now moored with Tung sha light-vessel bearing N. 54° W., or approximately in lat. 31° 3′ 30° N., long. 122° 9′ 0″ E.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutia.

Pablished for general information.

T. H. Chowes,

Under-Secretary, Marine Department.

CALCUTYA, the 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 260.

[Second Publication.]

AUSTRALIA, EAST-NEW CALEDONIA.

Port Burai - Exhibition of lights.

The British Admiralty has given notice (No. 737 of 1897) that, on 14th February 1897, two leading lights were exhibited at port Burai:—

- (1) The front light is a flacd red light, elevated 29 feet above the sea, visible about 10 miles in clear weather and shown between two iron posts, situated on the point at the east side of the northern entrance to Nera (Mero) river, in a position bearing N. 68° E., distant 1, ochles, from Buétaué rock.
 - Approximate position on Plan No. 1307, lat. 21° 36′ 45" S., long. 165° 27′ 15" E.
- (2) The rear light is a fixed white light, elevated 56 feet above the sea, visible about 10 miles in clear weather, and shown between two iron posts, situated N. 18° E., distant 505 feet from the front light.
 - Norg.—The above lights in line, bearing N. 18° E., lead in the channel from about 4 miles seaward to the anchorage.
- (3) Also, that a fixed green light, elevated 6 feet above the son, and visible from N. 68° E., through east, to S. 52° E. (over the anchorage), about 4 miles in clear weather, is shown from a shed situated N. 15° E., distant 165 yards, from the point on the northern side of the southern entrance to Nora river.

(Variation 10° Rasterly in 1897.)

B. P. CRBAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcorra, the 31st December 7897.

NOTICE TO MARINERS-No. 251.

[Becond Publication.]

CHINA SEA-HAINAN ISBAND.

Shoal S.S.B. of South-west point.

The British Admiralty has given notice (No. 788 of 1897) of the existence of a shoal of sand, about a mile in extent east and west, with a depth of 4% fathoms on it, situated in a position with Snake point bearing N.E. by E. ? E., distant 13 miles; and South-west point N.N.W. + W.

Approximate position, lat. 18° 17' N., long. 108° 471' E. (Variation 2° Easterly in 1897.)

B. P. CREAGH, Comdy., B.I. N.,

Port Officer of Calculta.

Published for general information.

T. H. OLOWES,

Under-Secretary, Marine Department,

CALCUTTA, the Slat December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 252. (Second Publication.] AFRICA, EAST-SOCOTRA.

Coral patch reported eastward of the Brothers.

THE British Admiralty has given notice (No. 739 of 1897) that information has been received that the Master of the German steam-vessel Hertha reports that, on 4th November 1897, when in a position with the centre of Jezirat Darsa beating W. & S.; and the bluff of Bas Kattanahan N.W. & W.; or approximately in lat. 12° 8′ N., long. 53° 50½ E., he saw a coral patch, about 100 feet long, with apparently depths of 3 to 4 feet on it.

The symbol for a rock with less than 6 feet water on it, with the words "Hertha 1897" written against it, has been placed on the Admiralty Charts in the above position.

(Variation 2º Westerly in 1897.)

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES,

CALGUTTA, the 31st December 1897.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 1.

[Second Publication.]

BAY OF BENGAL-HOOUNLY RIVER.

Caution .- Portion of a dhow awash.

The Master of the S.S. Sonator reports having passed a portion of a dhow awash S. 25° W. true, 350 miles from Eastern Channel light. The wreck is dangerous to shipping.

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Chowse,

CALCUTTA, the Srd January 1898.

Under-Searctury, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 243.

[Third Publication.]

BAY OF BENGAL-BURNA COAST.

Further postponement of the 12-mils light on Spit light-reesel.

WITH reference to Notice to Mariners No. 227, dated the 22nd November last, issued by this office, a telegraphic communication (No. 408 of 1897) has been received from the Port Officer, Rangoon, intimating that the exhibition of the 12-mile light on board the Spit lightvessel, Rangoon river, has been further postponed to 20th January next

B. P. CREAGH, Comdr., R.L.M., Port Officer of Calcuttu.

Published for general information.

T. H. Clowes,

rember 1897,

Under-Secretary, Marine Department.

CALOUTTA, the 27th December 1897,

NGTIOE TO MARINERS-No. 244;

[Third Publication! ?

BAY OF BENGAL-BURNA COAST.

Temporary relieving of Baragua, flate light-ressel passponed.

Were reference to Notice to Mariners No. 288, dated the 14th instant, issued by this office, a telegraphic communication (No. 405 of 1897) has been received from the Port Officer, Rangoon, intimating that the temporary relieving of the Baragua, flats light-vessel has been postponed to the end of January next.

> B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary; Marine Department.

CALCUTTA, the 27th December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 245,

[Third Publication.]

EASTERN ARCHIPELAGO -- MARASAR STRAIT.

Pulo Laut strait-Buoys and beacone placed, rock found.

THE British Admiralty has given notice (No. 716 of 1897) that the undermentioned buoys and heacons have been placed in Pulo Laut strait :-

1. A conical buoy, No. 1, painted black and marked S.L., moored in a depth of 4 fathoms at low water springs, at the south end of Keramat bank, in a position with free on south-east part of Suangi island bearing N. 12° E., distant 6, miles; and mount Jambangan (1621) S. 76° E.

Approximate position, lat. 3° 33′ 40° S., long. 115° 59′ 30" E.

- 2. A conical buoy, No. 2, painted black and marked S.L., moored in a depth of 4 fathoms at low water springs, at the north end of Keramat bank, in position with tree on Suangi island bearing N. 10° E., distant 33 miles; and centre of Salino N. 87° E
- 3. A conical buoy, No. 3, painted black and marked S.L., moored in a depth of 22 feet at low water springs, southward of Pampakan island, in a position with tree on Suangi bearing S. 26° W., distant 3‡ miles; and centre of islet eastward of Burung island N. 67° W.
- 4. A white beacon, surmounted by a ball, on the northern side of the rock which dries, a mile north-north-west of Selukutan, in a position with tree on Suangi bearing 8, 31° W., distant 5 no miles; and north point of Pampakan island N. 48° W.
- 5. A black beacon, surmounted by a triangle, in a depth of one foot at low water springs at the south end of Gusong Payung, in a position with the southern rock on that shoal bearing N. 35° E., distant 6 cables; and north point of Pampukan N. 87° W.
- 6. A black beacon, surmounted by a triangle, at the north end of Gusong Payung, in a position with the southern rock of that shoal bearing S. 20° W., distant 1 n miles; and islet at mouth of Dua river S. 77° W.
- Also, of the existence of a rock, with a depth of 9 feet on it at low water, on the east side of Suangi island, in a position with the tree on that island bearing S. 43° W., distant one mile; and northern point of islet eastward of Suangi N. 60° W.

(Variation 2º Easterly in 1897.)

B. P. CRBAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. OLOWES, Under-Secretary, Marine Department.

QATAUTTA, the 27th December 1897.

APPENDIX TO THE CALCUTTA GAZETTE, JANUARY 12, 1898,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 246.

[Third Publication.]

INDIA, WEST COAST-GULF OF KUTCH.

Light on Rojhi (Rozi) re-exhibited.

With reference to Notice to Mariners No. 206, dated 28th October last, issued by the office, the British Admiralty has given further notice (No. 719 of 1897) that on 1st October 1897, Rojhi (Rozi) light (fixed white, and other particulars presumed to be as given in List of Lights, part VI., 1897, No. 94) was re-exhibited.

Approximate position, lat. 22° 32′ 45" N., long. 70° 1′ 30" E.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutte.

Published for general information.

CALCUTTA, the 27th December 1897.

T. H. Clowss, Under-Secretary, Marine Department.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, JANUARY 19, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 6.

[First Publication.]

BAY OF BENGAL-CRITTAGONG COAST.

Chittagong River .- Depth of water found in the channels.

THE Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 8th January, and reduced to zero:

Track No. 1.—Outer bar—				Fr. 111.
#*************************************				
Disc in the centre of Diamond a	nd the Tripod	cask and ball	***	11 3
Disc on Tripod cask and ball	***	4 4 17	4++	10 0
Track No. 2 Inner bar-				
Disc on Diamond	144		***	11 0
Disc on Triped, cask and ball	***	***		10 0
Track No. 3-				
Tripod on cross and ball		114	***	19 0
Track No. 4-				
Triangle, Tripod, cask and ball	***			20 0
Track No. 5 Guptakhally crossing-				
Old marks	141	444	141	16 0
Centre		- 13	110	0
Tripod on Diamond	104	110	111	16 0
•	T)	P Corrett	Comde	D 7 M

B. P. CREAGH, Comdr., B 1.M., Port Officer of Calcutta

Published for general information.
T. H. Glowes,

Under-Secretary, Marine Department.

CALCUTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 6.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Intended light on Amherst point, entrance to Moulmein river.

The British Admiralty has given notice (No. 768 of 1898) that, on 1st April 1893, a light will be exhibited from the Pilot station, Amherst point.

Amherst point light will be a sixth order, dioptric, fixed rod light, elevated 68 feet above high water, and visible from N.N.E., through cast, to S.E., a distance of about 8 miles

Approximate position, lat. 16° 4′ 45" N., long. 97° 53′ 5" E. (Variation 3° Easterly in 1897.)

B. P. CREAGN, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 14th January 1898.

T. H. Clowen, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 7.

[First Publication.] CHINA, EAST-PE CHI LA STRAIT.

Port Arthur-Alteration in light.

The British Admiralty has given notice (No. 770 of 1897) that, on 20th October 1897, the light shown on the western side of the entrance to port Arthur was altered from fixed white to a sixth order, dioptric, group occulting light, with a period of twenty seconds, thus:—light, fourteen seconds; eclipse, two seconds; eclipse, two seconds.

It shows the following sectors:—rad, from N. 13° E. to the land to the westward; white from N. 13° E., through north, to N. 55° W.; rad, from N. 65° W. to N. 81° W.; and white from N. 81° W., through west, to S. 40° W.; is clevated 87 feet shove the sea, and in clear weather the white light should be visible 8 miles and the red light 5 miles.

The light is shown from a building, 7 feet, high, painted white, and situated to

The light is shown from a building, 7 feet high, painted white, and situated close to the south-east side of the old light-house, which is painted black and white in horizontal bank. The keeper's dwelling and boundary wall are painted white.

Approximate position, lat. 38° 47' 25" N., long. 121° 15' 25" E.

(Variation 40 Westerly in 1897.)

B. P. CHEACH, Comdr., MALE. Port Officer of Calentta

Published for general information.

T. H. Clower, Under Beerstory, Marine Department

Cancerrapille Life James 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 8; [First Publication.] AUSTRALIA-INNER BOUTE.

Shoals south-eastward of Night island.

Normez to Mariners No. 772 of 1897, issued by the British Admiralty, is republished. The following information, relating to the existence of shoals near Lowrie island, has been received from Lieutenant R. W. Glennie, H.M. Surveying Vessel Dart:—

(1) A coral shoal (Parry rock) of very small extent, with a least depth of 51 fathons on it at low water springs and 9 to 10 fathoms, mud bottom, close around, situated on the "course recommended," in a position with centre of Lowie island (No. VIII) bearing S. 47° W., distant nearly 2-2 miles; and Bow reef beacon (as shown on Chart No. 2921) S. 45° E.

Approximate position, lat. 13° 15′ 5″ S., long. 143° 36′ 45″ E.

- (2) A coral patch of small extent, with a depth of 8 fathoms on it and 10 to 11 fathoms, mud bottom, close around, in a position bearing N. 67° E., distant 5; cables, from shoal (1), or approximately in lat. 13° 14′ 55″ S., long. 148° 87′ 20° E.
- (8, A coral shoal (Howard rock) of very small extent, with a least depth of 41 fathoms on it at low water springs and 9 fathoms, mud bottom, close around, situated on the western side of the fairway, in a position with centre of Lourie island (No. VIII) bearing N. 75° W., distant 191 cables; and espe Sidmouth summit (350) S. 9° W.

Approximate position, lat. 13° 17′ 5″ S., long. 143° 36′ 45″ H.

Nors.—That portion of the "course recommended" which passes over the 54 fathers shoal has been erased from the Chart.

(Variation 5° Basterly in 1897.)

B. P. CERAGE, Comdr., a.i.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES. Under-Secretary, Marine Department.

CALCUTTA, the 14th January 1868.

NOTICE TO MARINERS-No. 9. [First Publication.]

PACIFIC OCEAN-SANDWICE ISLANDS.

Soundings on banks to the west-north-west.

Two British Admiralty has given notice (No. 774 of 1897) that information has been received that the undermentioned soundings were obtained by the United States vessel-of-

1. FROST BANK :-

Soundings of 63 to 12 fathoms, over a blue cose, blue mud, fine white sand, and rocky bottom, on this bank (originally reported by the vessel E. L. Frost in 1859) between late. 23° 45‡ N. and 23° 45′ N. and longs. 163° 33′ W. and 163° 18′ W. The 12 fathoms is situated approximately in lat. 23° 45‡ and 163° 18' W. The 12 fathoms is aituated approximately in lat. 23° 45' N., long. 163° 25' W.

N., long. 163° 25' W.

2. A counding of 47 fathoms, rocky bottom, in a position with Modu Manu (Bird island) bearing S. W. by S., distant 11 miles; or approximately in lat. 23° 10' N., long. 161° 47' W.

(Variation 11° Basterly in 1897.)

B. P. CREAGE, Comde., R.I.M., Port Officer of Calculla.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department

Ostobria, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 10.

[First Publication.] CHINA.

Typhoon and storm signals-Codes for signals.

With reference to Notice to Mariners No. 241, dated 17th December 1897, issued by this Office, the British Admiralty has given further notice (No. 777 of 1897) that further information has been received from the Chinese Government that, in making the typhoon and storm warning signals at the semaphores of the several ports, the flags of Marryat's Code will be used for the numbers, and those of the International Code for the letters only.

B. P. CREAGH, Camdr., B.1.M., Port Officer of Calcutta

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

Calcotta, the 14th January 1898

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 11.

[First Publication.] PACIFIC OCEAN-SANDWICH ISLANDS.

Hawaii-Exhibition of lights.

The British Admiralty has given notice (No. 779 of 1897) that a fixed white light, elevated 60 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, immework tower, painted white, and situated on Kouhola point, western side of Kecken harbour position. harbour, north coast of Hawaii.

Approximate position, lat. 20° 14% N., long. 155° 46% W.

Also, that a fixed white light, elevated 65 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, framework tower, painted white situated at Keawemoe, anthward of Alia point, east coast of Hawaii.

Approximate position, lat. 19° 51' N., long. 155" 61' W.

B. P. CREAGE, Comde., B.L.M., Part Officer of Calcutte.

Published for general information.

T. H. CLOWRS, Under-Secretary, Morine Department.

Calcoves, the 14th January 1898.

NOTICE TO MARINERS-No. 12.

[First Publication.]

AUSTRALIA-Torbes strait-inner eouts.

(1) Passage through the Great Barrier Reof, near the Howick group.

THE Port Master, Brisbane, has given notice (No. 20 of 1897) that Captain W. Dawson, of H.M.S. Waterwitch, reports having sounded out the passage through the Great Barrier Reef, which lies between Stapleton (X) Islet (in lat. 14° 19′ 12° S., long. 144° 51′ 3° E.) and

No. I sandbank.

The passage, which will be known hereafter as "Waterwitch Passage," is clear of dangers and carries a depth of 14 to 19 fathoms.

Vessels proceeding to sea from the Inner Route should pass between Bewick and Ingham Islands, and, having made Stapleton Island, leave it on the starboard hand is mile distant; then steering N. 10° E. (mag.) for 7.4 miles will bring No. I sandbank abeam. It is close to the edge of the reef, and should be passed on the starboard hand is mile distant. The passage is 1; miles wide, but the reef on the west aide of it should be given a good borth, as it was not sounded off. Heavy tide-rips and strong tidal currents are met with in the passage, but on the sandbank side it is always smooth. The northern edge of the reef west of Stapleton Island bears N. 62; W. from Stapleton. The channel between the two is 2.2 miles wide, and quite clear of dangers.

Charts affected—2922, 780 and 2964.

Australia Directory, Vol. II, page 348.

(2) Rock off Haughton Island-Howick group.

Also, that a Rock, with 18 feet on it at low-water springs, exists westward of Haughton Island. From it the summit of Howick Island bears N. 63 E. (mag)., distant 2-3 miles.

The rock is less than a mile off the recommended track.

Charts affected-2922 and 2764.

Australia Directory, Vol. If, page 347.

H. Landquist,
for Port Officer of Calcults.

Published for general information.

T. H. CLOWBA, Under-Secretary, Marine Department.

CALSUTTA, the 17th January 1898

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 13.

[First Publication.]

AUSTRALIA-FRANKLAND ISLANDS.

The islands incorrectly charted.

THE Port Master, Brisbane, has given notice (No. 21 of 1897) that the west extreme of Normanby Island (Frankland Islands) is found to be 2 cables further west than shown on Chart No. 2330.

Australia Directory, Vol. II, page 322.

H. LINDQUIST, for Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marin: Department.

CALCUTTA, the 17th January 1808.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 14.

[First Publication.]

AUSTRALIA-CAIRNS HABBOUR-TRINITY BAY.

Fairway beacon with illuminated gauge.

THE Port Master, Brisbane, has given notice (No. 22 of 1897) that an automatic electrical The Port Master, Brisbane, has given notice (No. 22 of 1897) that an automatic electrone tide guage, illuminated at night, is exhibited from the Fairway Beacon at the outer edge of the bar at Cairns Harbour. The beacon from which False Cape bears S. 79° 30′ E. and the front leading light S. 24° W. is placed in a depth of 15 feet at low-water springs, and is 150 feet from the line of lights and beacons marking the centre of the bar cutting. It is to be left on the port hand when entering.

The tide guage indicates the height of tide above low-water datum from I foot to 11 feet by means of a pointer moving round a clock-face dial looking seaward. The gauge does not indicate below I foot nor above 11 feet, the pointer resting at those points, so that I foot should be interpreted I fact or under and 11 feet as 11 feet and over.

The available depth in the cutting will be obtained by adding 12 6 to the height

shown by the guage.

The light will be visible in clear weather at a distance of 5 miles, except between the bearings of W. S. W. and S. S. E., between which bearings the direct light is obscured, and the frosted clock-face is only visible.

The old red Fairway Buoy has been removed. Charts affected—Nos. 2924 and 2350. Australia Directory, Vol. II, page 237.

> H. LINDQUIST, for Port Officer of Calcutta

Published for general information.

CALCUTEA, the 17th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 2. [Second Publication.] NEW ZEALAND-NORTH ISLAND.

Sunken wreck north-westward of Table cape.

Tuz British Admiralty has given notice (No. 744 of 1897) that the wreck of the steam-vessel Tasmania lies sunk in a depth of 15 fathoms, with the mastheads just below the surface of the water, in a position with the north-east extreme of Table cape bearing S. E. 4 S., distant about 37s miles; and point on northern side of entrance to Horaka river S. W. by

Approximate position, lat. 39° 2′ 40" S., long. 177° 59' 50" E. A marked buoy has been moored to each must of the wreck, but they should not be relied upon, and vossels should give the vicinity of the wreck a good berth in passing.

(Variation 14° Easterly in 1897.)

B. P. OREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 8th January 1898.

T. H. CLOWES, Under Scoretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 8. [Second Publication.] NEW ZEALAND-Cook STRAIT.

North island-Exhibition of cape Pulliser light.

With reference to Notice to Mariners No. 182, dated 18th September 1897, issued by this office, the British Admiralty has given further notice (No. 747 of 1897) that on 7th October 1897, cape Palliser light would be exhibited.

Cape Palliser (Rocky point) light is a second order, dioptric, group flashing whits light with a period of thirty seconds; showing two flashes, separated by an interval of three monds in each group.

monds, in each group.

It is elevated 258 feet above high water, and visible seaward, over an arc of 214° (or from about E. i N., through north and west, to S. W. i W.), a distance of 23 miles in

The lighthouse, an iron tower, painted white, on a concrete base, is 58 feet high, and 640 feet from high water mark, at an elevation of 210 feet above the sea.

Approximate position, lat. 41° 36′ 46″ S., long. 175° 18′ 45″ E.

CAUTION.—As the light is visible over Black rocks and part of the point to the northward of them, vessels should not approach within 5 miles of the lighthouse, until the vicinity of those rocks is passed.

B. P. CERAGH, Comdr., a.1.M., Port Officer of Calcutta.

Published for general information.

CALSUTTA, the 8th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS—No. 4. [Second Publication]
INDIA, WEST—SIND COAST.

Karachi harbour-Buoy marking southern limit of port.

The British Admiralty has given notice (No. 762 of 1898) that a conical buoy, painted red, has been moored in a depth of 20 feet at low water spring tides, in a position with the extremity of Manora point breakwater bearing West, distant 32 cables, to mark the southern limit of the port of Karachi.

limit of the port of Karachi.

This buoy will be withdrawn during the South-west monsoon.

Approximate position, lat. 24° 47′ 5″ N., long. 66° 59′ 15″ E.

(Variation 1º Easterly in 1897).

B. P. CREAGH, Comdr., M.M., Port Officer of Calcutta

Published for general information.

T. H. Chowns, Under-Secretary, Marine Deportment,

CALCUTTA, the 8th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 247.

[Third Publication.]

EASTERN ARCHIPELAGO -STRAIT OF MAKASSAR.

(1) Pulo Lawt strait-Rock south-eastward of Suangi island.

The British Admiralty has given notice (No. 726 of 1897) of the existence of a rock, which dries at half tide, or about 3 feet, and is about two-tenths of a cable in length east and west, situated with the tree on the south-east end of Sunngi island bearing N. 47° W., distant 8 cables; and entrance of Selaru river N. 38° E.

Approximate position, lat. 3° 27' 85" S., long. 116° 1' 40" E.

(2) Amended particulars of Heroules Resf. Ares Bank, &c.

(a) Heroules reef, in approximately lat. 2° 22½ S., long 116° 43' E., partly dries at low water.

A rock, with a depth of 16 feet on it, and about a cable in diameter is situated N, 20° E., distant 27° cables, from Hercules reef; and there are depths of 8 fathoms in a S.S.W. direction for about 14 cables from that reef, in other directions the soundings around Hercules reef are 12 to 19 fathoms.

(b) Ares bank, eastward of Ares or Aru point, is reported to be situated 2 miles westward of the position in which it has hitherto been shown, and a note to that effect has been placed on the chart.

The beacon on this bank is surmounted by a white ball, and situated approximately in lat. 2° 15′ 15″ S., long. 116° 39′ 80″ E.

(c) A rocky patch, now named September roof, consisting of sand, coral, and stones dries over a length of about 2 cables in a N. by E. and S by W. direction, and is about a cable in breadth. It is situated in approximately lat. 2° 17 10° S., long. 116° 48′ 10° E.

A rooky patch, of considerable extent, with a depth of 15 feet on it, is situated with its centre S. 54° W., distant 35 cables, from September reef; and there are other patches with depths of 5 to 6 fathoms on them, extending about a mile and a quarter southward, and nearly a mile northward and north-westward from September reef; the general depths around being 11 to 20 fathoms.

(d) A rock which dries, with depths of 4 fathoms around, is situated in approximately lat. 2° 21′ 50° S., long. 116° 36′ 40° E.; a rock, with a depth of 2 feet on it, in lat. 2° 24′ 50° S., long. 116° 35′ 0° E.; and a rock, with a depth of 4 feet on it, and depths of 2 fathoms around, in lat. 2° 27′ 20° S., long. 116° 34′ 5° R.

(Variation 2º Easterly 🏚 1897.)

B. P. Canage, Comdr., a.i.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF RENGAL - MARINE DEPARTMENT. NOTICE TO MARINERS-No. 249.

[Third Publication.]

AFRICA, EAST COAST-ZANZIBAD IBLAND.

Ras Nungue light regularly exhibited.

The British Admiralty has given notice (No. 727 of 1897) that the light on Ras Nungwe (revolving every half minute and other particulars as given at No. 52, List of Lights, part VI., 1897) is now regularly exhibited, and the word "occasional" against the light on the charts; and the remark on page 19 in Light List, part VI., should consequently be

Approximate position, lat. 5° 43' 5" S., long. 39° 18' 5" E.

B. P. OBRAGH, Comdr., B.LM., Port Officer of Calcutta.

Published for general information.

T. H. CLOWBS, Under-Secretary, Marine Department.

CALCUTTA, the 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 249.

[Third Publication.]

CHINA, EAST COAST-Yand TSE KIANG ENTRANCE.

Alteration in position of Farrway buoy.

Tax British Admiralty has given notice (No. 729 of 1897) that, in consequence of the recent movement of the South-east spit, Tung sha banks, to the south-westward, the fairway buy (bell, red and black horizontal stripes) at the entrance of the South channel of the Yang tee kiang has been moved one mile to the southward, and is now moored with Tung sha light-vessel bearing N. 54° W., or approximately in lat. 31° 3′ 30° N., long. 122° 9′ 0° E.

B. P. Curage, Comdr., R.1.M., Port Officer of Calcutta.

Published for general information.
T. H. Clowes. Under-Secretary, Marine Department.

CALCUTTA, th 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 250.

[Third Publication.]

AUSTRALIA, EAST-New Caledonia.

Port Burai - Exhibition of lights.

The British Admiralty has given notice (No. 737 of 1897) that, on 14th February 1897, two leading lights were exhibited at port Burai:—

- (1) The front light is a fixed red light, elevated 29 feet above the sea, visible about 10 miles in clear weather and shown between two iron posts, situated on the point at the east side of the northern entrance to Ners (Mero) river, in a position bearing N. 65° E., distant 170 cables, from Buétaué rock.
- Approximate position on Plan No. 1307, lat. 21° 36′ 45″ S., long. 165° 27′ 15″ E.
- (2) The rear light is a fixed white light, elevated 56 feet above the sea, visible about 10 miles in clear weather, and shown between two iron posts, situated N. 18° E., distant 505 feet from the front light.
 - Norz.—The above lights in line, bearing N. 18° E., lead in the channel from about 4 miles seaward to the anchorage.
- (8) Also, that a fixed green light, elevated 6 feet above the sea, and visible from N. 63° E., through east, to S. 52° E. (over the anchorage), about 4 miles in clear weather, is shown from a shed situated N. 15° E., distant 165 yards, from the point on the northern side of the southern entrance to Nera river.

(Variation 10° Easterly in 1897.)

B. P. CRBAGH, Comdr., A.I.M. Port Officer of Oalcutte.

Published for general information.

T. H. CLOWBA, Under-Secretary, Marine Department.

Calcorra, the 31st December 1897.

NOTICE TO MARINERS-No. 251.

[Third Publication.]

CHINA SEA-HAINAN ISLAND.

Shoal S.S.E. of South-west point.

THE British Admiralty has given notice (No. 738 of 1897) of the existence of a sheal of sand, about a mile in extent east and west, with a depth of 42 fathoms on it, situated in a position with Snake point bearing N.E. by E. 2 E., distant 13 miles; and South-west point N.N.W. 1 W.

Approximate position, lat. 18° 17' N., long. 108° 471' E.

(Variation 2º Easterly in 1897.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWNS, Under-Secretary, Marine Depurer ent.

CALOUTTA, the 31st December 1897.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 242.

[Third Publication.] AFRICA, EAST-SOCOTRA.

Coral patch reported eastward of the Brothers.

The British Admiralty has given notice (No. 739 of 1897) that information has been received that the Master of the German steam-vessel Hertha reports that, on 4th November 1897, when in a position with the centre of Jezirat Darsa bearing W. & S.; and the bluff of Ras Kattanahan N.W. & W.; or approximately in lat. 12° 8′ N., long. 53° 50 ½ E., he saw a coral patch, about 100 feet long, with apparently depths of 3 to 4 feet on it.

The symbol for a rock with less than 6 feet water on it, with the words "Hertha 1897" with the above received.

written against it, has been placed on the Admiralty Charts in the above position.

(Variation 2º Westerly in 1897.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta,

Published for general information.

CALCUTTA, the 31st December 1897.

T. H. OLOWBS, Under-Secretary, Marins Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 1.

[Third Publication.]

BAY OF BENGAL-HODGHLY RIVER.

Caution .- Portion of a dhow areash.

THE Master of the S.S. Senator reports having passed a portion of a dhow awash S. 25° are, S50 miles from Eastern Channel light. The wreck is dangerous to shipping. W. true, 350 miles from Eastern Channel light.

B. P. CREAGH, Comir., B.I.K., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the Srd January 1888.

T. H. CLOWES, Under-Secretary, Marine Department.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, JANUARY 26, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 15.

(First Publication.)

PACIFIC OCEAN-DIANA SHOAL

An unsuccessful search.

Notice No. 790 of 1897 issued by the British Admiralty is republished.

Information has been received from Captain A. Mostyn-Field, H.M. Surveying Vessel Penguin, that, in August 1897, he sounded over an area embracing 80 miles in longitude and nearly 40 miles in latitude, in the vicinity of Diana shoal, originally reported in 1852 as having a depth of I feet on it, and as being situated in lat. 8° 40° N., long. 157° 20° W. The Peguin spent 5 days in the search, obtaining soundings of from 2,560 to 2,946 fathoms at distances of 7 to 10 miles apart, and observing no indication of a shoal in any part of the locality.

In view of the above, and the fact that schooners have plied for many years between Honolulu and Fanning island over the position of the shoal, and that it has not been seen since the first vague report, Diana shoal has been expunged from the Admiralty Charts.

H. Landquier, for Port Officer of Uniontia.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Ostourra, the 18th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENTS

NOTICE TO MARINERS-No. 16.

[First Publication].

EASTERN ARCHIPELAGO-LINGA ISLAND.

Light on south-east point.

The British Admiralty has given notice (No. 797 of 1897) that, about the end of November 1897, a fourth order, group-flushing light, showing two flushes in quick succession in each group, was exhibited from Eurog or Diang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 141' S., long. 104° 571' E.

Further Notice will be given when more particulars are known.

Nors. - The correct name for the point on which the lighthouse stands is Jang and not Eung or Diang. The Admiralty Charts have now been amended.

> H. LINDQUIST, for Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the 18th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT

NOTICE TO MARINERS-No. 17.

[First Publication.]

AFRICA, EAST COAST-Mozemuidon.

Lloyd's Signal station at Fort St. Bedarlian.

THE British Admiralty has given notice (No 801 of 1897) that information has been received from Lloyd's, dated 16th December 1897, that a Signal station has been established at fort St. Sebasatian, north-east end of Mozambique island.

Approximate position lat. 15° 0′ 45″ S., long. 40° 44′ 45° E.

H. Landouist. for Port Officer of Calculta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTEA, the 18th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS—No. 18.

(First Publication.)

BAY OF BENGAL-CHITTAGORG COAST.

River marks and buoys replaced.

Wirm reference to Notice to Mariners No. 210, dated 1st November 1897, the Post Officer, Chittagong, has given further notice that all the river marks and buoys that were either destroyed or were out of position by the late cyclone have been replaced in position.

B. P. CREAGE, Comdr., E.I.M., Port Officer of Calcutte.

Published for general information.

T. H. Cleans, Under-Secretary, Marine Department.

CALOUTTS, the 24th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 19.

[First Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

Blue lights at Kutubdia lighthouse.

WITH reference to Notice to Mariners No. 209, dated 80th October 1897, the Port Officer, Chittagong, has given further notice that on and after the 1st March next, blue lights will be burnt from the Kutubdia lighthouse every half hour. The light is visible 17 miles to seeward in clear weather. miles to seaward in clear weather.

B. P. CREAGE, Comdr., R.I.N., Part Officer of Calcutts.

Published for general information.

T. H. Clowns, Under-Secretary, Marine Department.

CALOUTEA, the 24th January 1808.

NOTICE TO MARINERS-No. 8.

[Second Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

Chittagong River .- Depth of water found in the channels,

The Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 8th January, and reduced to sero:—

Fruit No. 1.—Outer bar-				Fr. :	w.
Disc in the centre of Diamond and Disc on Tripod cask and hall	the Tripod	osek and bell	1 p. s.	. 11 10	3 0
Track No. 2 Innor bar-					
Disc on Diamond Disc on Tripod, cask and ball	440	164	***	11 10	0
Track No. 8-					
Tripod on cross and ball	411	A # 4	***	19	0
Track No. 4-					
Triangle, Tripod, cask and ball	***	***	101	20	0
Track No. 5 Guptakhally crossing-					
Old marks	***	444		16	0
Centre	***	* * *	414	16	0
Tripod on Diamond		***	-	15	0

B. P. ORBAGH, Comde., R 1.M., Port Officer of Calcutta,

Published for general information.

T. H. CLOWES. Under-Secretary, Marine Department,

CALCUTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MABINERS-No. 6.

[Second Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Marteban-Intended light on Amherst point, entrance to Mondmein river.

THE British Admiralty has given notice (No. 768 of 1898) that, on 1st April 1898, a light will be exhibited from the Pilot station, Amherst point.

Amherst point light will be a sixth order, dioptric, fixed rad light, elevated 66 feet above high water, and visible from N.N.E., through east, to S.E., a distance of about 8 miles in clear weather. in clear weather.

Approximate position, lat. 16° 4′ 45" N., long. 97° 68′ 5" E.

(Variation 3º Easterly in 1897.)

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calculta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 14th January 1808.

NOTICE TO MARINERS-No. 7.

[Second Publicaion.]

CHINA, EAST-PE CHI LI STRAIT.

Port Arthur-Alteration in light.

THE British Admiralty has given notice (No. 770 of 1897) that, on 20th October 1897, the light shown on the western side of the entrance to port Arthur was altered from fixed white

the light shown on the western side of the entrance to port Arthur was altered from fixed white to a sixth order, dioptrie, group occulting light, with a period of twenty seconds, thus:—light, fourteen seconds; eclipse, two seconds; light, two seconds; eclipse, two seconds.

It shows the following sectors:—red, from N. 13° E. to the land to the westward; white, from N. 13° E., through north, to N. 55° W.; red, from N. 55° W. to N. 81° W.; and white from N. 81° W., through west, to S. 40° W.; is elevated 87 feet above the sea, and in clear weather the white light should be visible 8 miles and the red light 5 miles.

The light is shown from a building, 7 feet high, painted white, and situated close to the south-east side of the old light-house, which is painted black and white in horizontal bands. The keeper's dwelling and boundary wall are painted white.

The keeper's dwelling and houndary wall are painted white.

Approximate position, lat. 38° 47' 25° N., long. 121° 15' 25" E.

(Variation 4º Westerly in 1897.)

B. P. OBRAGH, Comdr., B.1.M., Port Officer of Calcutta,

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department.

CALUUTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 8. [Second Publication.]

AUSTRALIA-INNER ROUTE.

Shoale south-eastward of Night island.

Notice to Mariners No. 772 of 1897, issued by the British Admiralty, is republished. The following information, relating to the existence of shoals near Lowrie island, has been received from Lieutenant R. W. Glennie, H.M. Surveying Vessel Dart:—

(1) A coral shoal (Parry rock) of very small extent, with a least depth of by fathous on it at low water springs and 9 to 10 fathoms, mud bottom, close around, situated on the "course recommended," in a position with centre of Lowie island (No. VIII) bearing S. 47° W., distant nearly 2.5 miles; and Bow reef beacon (as shown on Chart No. 2921) S. 45° E.

Approximate position, lat. 13° 15′ 5″ S., long. 143° 36′ 45″ E.

- (2) A coral patch of small extent, with a depth of 8 fathoms on it and 10 to 1 fathoms, mud bottom, close around, in a position bearing N. 67° E., dir it 5½ cables, from shoal (1), or approximately in lat. 13° 14′ 55° S., king. 143° 37′ 20° E.
- (8) A coral shoal (Howard rook) of very small extent, with least depth of 43 fathems on it at low water springs and 9 fathoms, mud bottom, close around, situated on the western side of the fairway, in a position with centre of Lourie island (No. VIII) bearing N. 75° W., distant 19½ cables; and cape Sidmouth summit (350) S. 9° W.

Approximate position, lat. 13° 17′ 5° S., long. 143° 36′ 45° E.

Nors.—That portion of the "course recommended" which passes over the 5% fathom shoal has been erased from the Chart.

(Variation 5° Easterly in 1897.)

B. P. CHEAGH, Comdr., a.J.M., Port Officer of Calcutta.

Published for general information.

T. H. GLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 9. [Second Publication,] PACIFIC OCEAN-SANDWICH ISLANDS.

Soundings on banks to the west-north-west.

The British Admiralty has given notice (No. 774 of 1897) that information has been received that the undermentioned coundings were obtained by the United States vessel-of-

1. FROST BANK :-

Soundings of 63 to 12 fathoms, over a blue coze, blue mud, fine white sand, and rocky bottom, on this bank (originally reported by the vessel E. L. Frost in 1859) between lats. 28° 454′ N. and 23° 45′ N. and longs. 163° 33′ W. and 163° 18′ W. The 12 fathoms is situated approximately in lat. 23° 454′ N. and 163° 18′ W.

A sounding of 47 fathoms, rocky bottom, in a position with Modu Manu (Bird island) bearing S.W. by S., distant 11 miles; or approximately in lat. 23° 10′ N., long. 161° 47″ W.

(Variation 11º Restorly in 1897.)

B. P. CREAGE, Condr., R.I.M., Port Officer of Galerata.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcutta, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 10. [Second Publication.] CHINA.

Typhoon and storm signals-Codes for signals.

With reference to Notice to Mariners No. 241, dated 17th December 1897, issued by this Office, the British Admiralty has given further notice (No. 777 of 1897) that further information has been received from the Chinese Government that, in making the typhoon and storm warning signals at the semaphbros of the several ports, the flags of Marryat's Code will be used for the numbers, and those of the International Code for the letters only.

B. P. CREACH, Comdr., L.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the Ilik January 1898.

IL

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 11,

[Second Publication.]

PACIFIC OCEAN-SANDWICH ISLANDS.

Hawaii - Exhibition of lights.

The British Admiralty has given notice (No. 779 of 1897) thas a fixed white light, elevated 60 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, framework tower, painted white, and situated on Kouhola point, western side of Keokea harbour, north coast of Hawaii.

Approximate position, lat. 20° 14½' N., long. 155° 46½' W.

Also, that a fixed white light, elevated 65 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, framework tower, painted white situated at Keawemos, southward of Alia point, east coast of Hawaii.

Approximate position, lat. 19° 51' N., long. 155° 61' W.

B. P. CREAGE, Comdr., BI.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

Calcures, the 14th January 1898.

NOTICE TO MARINERS-No. 12.

[Second Publication.]

AUSTRALIA-Toraks STRAIT-INDER ROUTE.

(1) Passage through the Great Barrier Reef, near the Howick group.

THE Port Master, Brisbane, has given notice (No. 20 of 1897) that Captain W. Dawson, of H.M.S. Waterwitch, reports having sounded out the passage through the Great Barrier Reef, which lies between Stapleton (X) Islet (in lat. 14° 19′ 12° S., long. 144° 51′ 3° E.) and

Reef, which lies between Stapleton (X) later (in lat. 14 15 12 5., long. 144 5. 5.) and No. 1 sandbank.

The passage, which will be known hereafter as "Waterwitch Passage," is clear of dangers and carries a depth of 14 to 19 fathoms.

Vessels proceeding to sea from the Inner Route should pass between Bewick and Ingham Islands, and, having made Stapleton Island, leave it on the starboard hand \(\frac{1}{2}\) mile distant; then steering N. 10° E. (mag.) for 7.4 miles will bring No. 1 sandbank abeam. It is close to the edge of the reef, and should be passed on the starboard hand \(\frac{1}{2}\) mile distant. The passage is 1\(\frac{1}{2}\) miles wide, but the reef on the west side of it should be given a good berth, as it was not sounded off. Heavy tide-rips and strong tidal currents are met with in the passage, but on the saudbank side it is always smooth. The northern edge of the reef west of Stapleton Island bears N. 62\(\frac{1}{2}\) W. from Stapleton. The channel between the two is 2'2 miles wide, and quite clear of dangers.

Charta affected—2922, 780 and 2964.

Australia Directory, Vol. II, page 348.

(2) Rock off Haughton Island-Howick group.

Also, that a Rock, with 18 feet on it at low-water springs, exists westward of Haughton Island. From it the summit of Howick Island bears N. 63° E. (mag)., distant 2.3 miles. The rock is less than a mile off the recommended track.

Oharts affected—2922 and 2764.

Australia Directory, Vol. II, page 347.

H. LINDQUIST, for Port Officer of Valoutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

CALAUTTA, the 17th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 18.

(Second Publication.) AUSTRALIA-FRANKLAND ISLANDS.

The islands incorrectly charted.

THE Port Master, Brisbane, has given notice (No. 21 of 1897) that the west extreme of Normanby Island (Frankland Islands) is found to be 2 cables further west than shown on Chart No. 2350

Australia Directory, Vol. II, page 322.

H. LINDQUIST, for Port Officer of Calculta

Published for general information.

T. H. Clowes; Under-Secretary, Mirin: Department.

CALCOTTA, the 17th January 1808.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 14

[Second Publication.]

AUSTRALIA-CAIRNS HARBOUR-TRINTIT BAY.

Fairway beacon with illuminted gauge

THE Port Master, Brisbane, has given notice (No. 22 of 1897) that an automatic clock face tide guage, illuminated at night, is exhibited from the Fairway Beacon at the outer edge of the bar at Cairns Harbour. The beacon from which False Cape bears 8. 79° 30′ E and the front leading light 8. 24° W. is placed in a depth of 15 feet at low-water springs, and is 150 feet from the line of lights and beacons marking the centre of the bar cutting. It is to be left on the part hand when contains. to be left on the port hand when entering.

The tide guage indicates the height of tide above low-water datum from 1 foot to 11 feet by means of a pointer moving round a clock-face dial looking seaward. The gauge does not indicate below 1 foot nor above 11 feet, the pointer resting at those points, so that 1 foot should be interpreted 1 foot or under and 11 feet as 11 feet and over.

The available depth in the cutting will be obtained by adding 12' 6" to the height

thown by the guage.

The light will be visible in clear weather at a distance of 5 miles, except between the bearings of W. S. W. and S. S. E., between which bearings the direct light is obscured, and the frosted clock-face is only visible.

The old red Pairway Buoy has been removed. Charts affected—Nos. 2924 and 2350. Australia Directory, Vol. II, page 237.

> H. LINDQUIST, for Port Officer of Calcutta,

Published for general information.

CALCUTTA, the 17th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 2. [Third Publication.] NEW ZEALAND-NORTH ISLAND.

Sunken week north-westward of Table caps.

Tun British Admiralty has given notice (No. 744 of 1897) that the wreck of the steamremaind lies sunk in a depth of 15 fathoms, with the mastheads just below the surface of the water, in a position with the north-east extreme of Tuble cape bearing S. E. 18. distant about 3.75 miles; and point on northern side of entrance to Horaka river S. W. by W. 1 W.

Approximate position, lat. 89° 2′ 40" S., long. 177° 59′ 50" E.

A marked buoy has been moored to each mast of the wreck, but they should not be relied upon, and vessels should give the vicinity of the wreck a good berth in passing.

(Variation 14° Easterly in 1897.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutte.

Published for general information.

CALCUTTA, the 8th January 1898.

T. H. CLOWER, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 8. [Third Publication.] NEW ZEALAND-Cook STRAIT.

North island-Exhibition of cape Palliser light.

twire reference to Notice to Mariners No. 182, dated 18th September 1897, issued by this office, the British Admiralty has given further notice (No. 747 of 1897) that on 7th October 1897, cape Palliser light would be exhibited.

Cape Palliser (Rocky point) light is a second order, dioptric, group flashing white light with a period of thirty accords; showing two flashes, separated by an interval of three

the special of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of t

The lighthouse, an iron tower, painted white, on a concrete base, is 58 feet high, and 640 feet from high water mark, at an elevation of 210 feet above the sea.

Approximate position, lat. 41° 36′ 45″ S., long. 175° 18′ 45″ E.

CAUTION.—As the light is visible over Black rocks and part of the point to the north-ward of them, vessels should not approach within 5 miles of the lighthouse, until the vicinity of those rocks is passed.

B. P. CREAGH, Comdr., 2.1.M., Part Officer of Calcutta.

Published for general information.

Calcorna, the 8th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department,

APPENDIX TO THE CALCUTTA GAZETTE, JANUARY 26, 1808,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 4. [Third Publication.]

INDIA, WEST-SIND COAST.

Karachi harbour-Buoy marking southern limit of port.

THE British Admiralty has given notice (No. 762 of 1898) that a conical buoy, painted red, has been moored in a depth of 20 feet at low water spring tides, in a position with the extremity of Manora point breakwater bearing West, distant 3½ cables, to mark the southern limit of the port of Karachi.

This buoy will be withdrawn during the South-west monsoon.

Approximate position, lat. 24° 47′ 5″ N., long. 66° 59′ 15″ E.

(Variation 1º Easterly in 1897).

B. P. Carach, Comdr., Bel.M., Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department,

OALOUTIA, the 8th January 1898.

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APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, FEBRUARY 2, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 20.

[First Publication.]

BAY OF BENGAL-ORISSA COAST.

Outer western Ridge buoy under repaire.

The Port Officer, False Point, has given notice that the outer western Ridge buoy has been taken ashore for repairs, and that it has been replaced by a fifth class flat topped buoy.

B. P. CRHAGH, Comdr., R.I.M., Port Officer of Calcusts.

Published for general information.

OALCUTTA, the 25th January 1898.

T. H. Clowns, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 21.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

Temporary relieving of Baragua flats light-vessel further postponed.

In continuation of Notice to Mariners No. 244, dated 27th December last, the Port Officer, Rangoon, has given notice that the relieving of Baragua flats light-vessel has been further postponed to the 10th February next.

B. P. CREAGH, Comde., R.I.M., Port Officer of Calcutta.

Published for general information.

OLLOUTTA, the 25th January 1898.

T. H. CLOWBS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 33.

[First Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

South Paiches-Disappearance of Whistling buoy.

Tax Port Officer, Ohittagong, has given notice that the Whistling buoy, South Patches, has disappeared.

B. P. ORRAGH, Comdr., R.I.M., Port Officer of Calcutie.

Published for general information.

OALOUSTA, the 26th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 23.

[First Publication.] OHINA-PE CHILI STRAIT.

Lian ti shan lighthouse - Fog signal.

THE British Admiralty has given notice (No. 803 of 1897) that, on 20th October 1897, the undermentioned fog signal would be established at Linu ti shan lighthouse:—

During thick or foggy weather, in answer to signals from approaching vessels, a gun will be fired three times, with an interval of one minute between two successive reports. Should the vessel's signals continue to be heard, the above signal will be repeated after an interval of fifteen minutes.

Approximate position, lat. 38° 43′ 15" N., long. 121° 8′ 15" E.

B. P. Ownices, Comde', string, Port Officer of Can

Published for general information.

CALCUTTA, the 29th January 1898.

T. H. CLOWES, United-Sporetary, Marine Department.

GOVERNMENT OF BENGAL MARINE DEPARTMENT.

NOTICE TO MARTNERS-No. 24.

[First Publication.] JAPAN-Koxea STRATT.

Ten sima-Sunken rook southward of Mame (Zonzon) sima.

The British Admiralty has given notice (No. 805 of 1897) of the existence of a rock, with a depth of 41 fathoms on it at low water springs, situated in a position with Ko (Koo) saki lighthouse bearing S. 85° E., distant 2₁₀ miles; and Mame saki N. 80° E.

Approximate position, lat. 34° 5′ 30" N., long. 120° 8′ 50' E.

(Variation 4º Westerly in 1897.)

B. P. OBRAGH, Comdr., R.I.M., Port Officer of Galettia.

Published for general information.

CALGOTTA, the 29th January 1898:

T. H. CLOWER, Under-Secretary, Marine Department

GOVERNMENT OF BENGAL, -MARINE DEPARTMENT. NOTICE TO MARINERS -No. 26.

[First Publication.]

KOREA, SOUTH-WEST COAST THISTER ISLAND.

Rocks.

THE British Admiralty has given notice (No. 808 of 1897) of the existence of the undermentioned two rocks :-

One, which dries at low water, situated midway between the Thistle island marked (406) and the small island next eastward of it.

Approximate position, lat. 84° 23' N., long. 126° 01' E.

2. The other, which also dries at low water situated N.N.W., distant 2 cables, from the last-mentioned small island.

(Variation 45 Westerly in 1897.)

B. P. Cantou, Conder, A.t. W., Port Officer of Calculus

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcoull, the 29th January 1898.

NOTICE TO MARINERS-No. 38:

[First Publication.]

AFRICA, PAST-RED SEA, BASTERN SHORE.

Kamaran approach—Shoal south-east of Riskel island.

The British Admiralty has given notice (No. 806 of 1897) that the extremity of the feel ground south-eastward of Rishah island, where there is a depth of 43 fathores, is situated with beacon on summit of Rishah island bearing N.W. by N., distant 170 miles.

Approximate position, lat. 15° 9′ 50° N., long. 42° 34′ 20° E.

A depth of 45 fethous, with the words "Reported 1897" written against it, has been placed on the Admiralty Chart in the above position.

(Variation 4º Westerly in 1897.)

B. P. CREAGH, Comdr., B.I.M. Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 27.

(First Publication,)

AUSTRALIA, EAST COAST-HIGHINBEGOW CHARNEL.

Alteration in light on Lucinda point.

The British Admiralty has given notice (No. 809 of 1897) that the light on Lucinda point, which is visible from S. 19° E. to S. 49° E., has been altered in colour from white to eed.

Approximate position on Chart No. 2349, lat. 18° 31' 25" S., long. 140° 20' 10" E. (Variation 7º Easterly in 1897.)

B. P. CREAGH, Comdr., R.I.K., Port Officer of Coloute.

Published for general information.

OLLGUTTA, the 29th January 1808.

T. H. CLOWES, Under-Beerstary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 38.

[First Publication.]

EASTERN AROHIPELAGO-SUMBANA.

(1) Rocks southward of Madang (Flat island).

The British Admiralty has given notice (No. 811 of 1897) of the existence of a rock, about 23 cables in length, N.N.W. and S.B.E., and half a cable broad, part of which dries at low water, situated about S. by W. 4 W. from Madang west point, or approximately in lat. 8° 14′ S., long. 117° 18′ E. A rock, with a depth of 3 fathoms on it, is situated N. 43° E., distant 14 cables, from the south part of the above rock.

(8) Doubtful existence of sunken rocks in Saleh strait.

Also, that the two rocks, marked as with less than 6 feet of water on them, in Saleh strait, the western ont in approximately lat. 80° 23′ S., long. 117° 27′ E., the other about 14 miles fastward of that position, are not known to the native Pilots, and their existence is considered doutful.

Pending a further search, the letters E. D. have been placed against each of these rocks

on the Charte.

(5) Dry sand bank northward of Dangan Besar.

Also, of the existence of a sand bank, which dries, in a position with north-east point of Dangan Besar bearing S. 39° E., dietant 110 miles; and Tanah or Baras point, S. 76° W. Depths of 10 to 15 fathoms were found between the sand bank and the rocks northward of Dangan Besar.

Approximate position, sand bank, lat. 8° 23‡' S., long. 117° 39' B. (Pariation 2° Easterly in 1897.)

B. P. Canacan, Comden, u.t.m., Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCOUTA, the 80th January 1898.

NOTICE TO MARINERS-No. 30.

[First Publication.] JAPAN-YEZO.

Sunken rock northward of cape Tomomai (Shishkoff).

The British Admiralty has given notice (No. 818 of 1897) of the existence of a rook with a depth of 3 fathoms on it, with 3 fathoms for a distance of 3 cables northward, and depths of 8 to 10 fathoms around, situated in approximately lat. 44° 22° 0° N., long. 141° 38° E.

Nors.—The coast, from Tomomai village for about 10 miles southward, has sheel water extending 3 to 6 cables from it.

B. P. CHRAGH, Comdr., R.I.M., Port Officer of Calcutte.

Published for general information.

CALCUTEA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 30.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Temporary alteration in Krishna light vessel and light.

THE British Admiralty has given notice (No. 4 of 1898) that, on 28th November 1897, Krishna light vessel (group-flashing white light) was temporarily withdrawn, and replaced by the light vessel Martaban, which shows a flashing white light every forty-five seconds, thus :light, five seconds; eclipse, forty seconds.

Approximate position, lat. 15° 36' N., long. 95° 84' E.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcula.

Published for general information.

T. H. CLOWES,

CALCUTTA, the S1st January 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 81.

[First Publication.]

AUSTRALIA, NORTH COAST-THURSDAY ISLAND HARBOUR.

Sunken rock northward of Heath point.

The British Admiralty has given notice (No. 6 of 1898) that the rock, with a depth of 19 feet on it at low water, on which the steam-vessel Duke of Deconshire recently struck, and now named Devonshire rock, is situated on a bank stretching off Heath point, with the flagstaff a quarter of a mile westward of Heath point bearing 8.65° W., distant 3° cables; and black beacon at western extreme of Thursday island shore reef N. 37° W.

Approximate position, lat. 10° 35′ 40° S., long. 142° 12′ 20° E.

(Variation 5° Easterly in 1897.)

B. P. ORBAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES,

CALCUTTA, the 31st January 1898.

Under-Secretary, Murine Department.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-(No. 32.)

[First Publication.]

EASTERN ARCHIPELAGO .- LINGA ISLAND.

Light on Jang point exhibited.

With reference to Notice to Mariners No. 16, dated 18th January, issued by this office, the British Admiralty has given further notice (No. 7 of 1898) that on 7th December 1897, a fourth order, group-flashing light, with a period of thirty seconds, showing two flashes in quick succession in each group, was exhibited from Jang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 141 S., long. 104° 571 E.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 81st January 1898.

NOTICE TO MARINERS-No. 15.

[Second Publication.] PACIFIC OCEAN-DIANA SHOAL

An unsuccessful search.

Normal No. 790 of 1897 issued by the British Admiralty is republished.

Information has been received from Captain A. Mostyn-Field, H.M. Surveying Vessel Information has been received from Captain A. Mostyn-Field, H.M. Surveying Vessel Penguin, that, in August 1897, he sounded over an area embracing 50 miles in longitude and nearly 40 miles in latitude, in the vicinity of Diana shoel, originally reported in 1852 as having a depth of 6 feet on it, and as being situated in lat. 8° 40′ N., long. 157° 20′ W. The Pequin spent 5 days in the search, obtaining soundings of from 2,560 to 2,946 fathoms at distances of 7 to 10 miles apart, and observing no indication of a shoel in any

part of the locality.

In view of the above, and the fact that schooners have plied for many years between Honolulu and Fanning island over the position of the shoal, and that it has not been seen since the first vague report, Diana shoal has been expunged from the Admiralty Charts.

H. Innoquier, for Post Officer of Unionita. Published for general information.

CALCUTTA, the 18th January 1898.

T. H. CLOWES, Under-Secretary, Marine Deputte ent.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 16. [Second Publication.]

EASTERN ARCHIPELAGO-LINGA ISLAND.

Light on south-east point.

The British Admiralty has given notice (No. 797 of 1897) that, about the end of November 1897, a fourth order, group-flathing light, showing two flathes in quick succession in each group, was exhibited from Eung or Diang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 14½ S., long. 104° 57½ E. Further Notice will be given when more particulars are known.

Note.—The correct name for the point on which the lighthouse stands is Jang and not Euog or Diang. The Admiralty Charts have now been amended.

H. LINDQUIST. for Port Officer of Caloutta.

Published for general information.

CALCOTTA, the 18th January 1898.

T. H. CLOWES, Under-Secretary, Maries Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT

NOTICE TO MARINERS-No. 17.

[Second Publication.]

AFRICA, EAST COAST-MOZAMBIQUE.

Lloyd's Signal station at Fort St. Sebastian.

The British Admiralty has given notice (No. 801 of 1897) that information has been received from Lloyd's, dated 16th December 1897, that a Signal station has been established at fort St. Sebastian, north-east end of Mozambique island.

Approximate position lat. 15° 0′ 46° S., long. 40° 44′ 45° E.

H. LINDQUIST, for Port Officer of Valentia.

Published for general information.

Calcorra, the 18th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 18.

[Second Publication.]

BAY OF BENGAL-CHRITAGONG COAST.

River marks and buoys replaced.

With reference to Notice to Mariners No. 210, dated 1st November 1897, the Port officer, Chittagong, has given further notice that a'll the river marks and buoys that were either destroyed or were out of position by the late cyclone have been replaced in position.

B. P. CREAGH, Condr., R.I.N., Port Officer of Calcutta.

Published for general information.

T. H. Clows.

CALCUTTA, the 24th January 1898.

Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 19.

[Second Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

Blue lights of Kutubdia lighthouse.

Wrrn reference to Notice to Mariners No. 209, dated 30th October 1897, the Port Officer, Chittagong, has given further notice that on and after the 1st March next, blue lights will be burnt from the Kutubdia lighthouse every half hour. The light is visible 17 miles to seaward in clear weather.

B. P. Cabash, Comdr., a.l.u., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department,

CALCUTTA, the 24th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINEBS-No. 6.

[Thid Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

Chittagong River .- Depth of water found in the channels.

The Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 8th January, and reduced to zero:—

				FT. I	IN.	
Track No. 1 Outer bar-						
Disc in the centre of Disc		d caak and ball	4+4	11	3	
Disc on Tripod cask and	ball	411		10	0	
Track No. 2 Inner bar-						
Disc on Diamond	*** ***	***	4+4	11	0	
Disc on Tripod, cask and	ball	100	***	10	0	
Track No. 3-						
Tripod on cross and ball	464	411		19	0	
Track No. 4-						
Triangle, Tripod, cask ar	nd ball			20	0	
Track No. 5 Guptakhally ord	ossing-					
Old marks	141 441	***	101	16	0	
Centre	945 854	.,.	414	16	0	
Tripod on Diamond		111	111	15	0	
		B. P. OREAGH.	Coma	lr., R I	.M.,	
					Calmitta.	

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOURTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 6.

[Third Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Intended light on Amherst point, entrance to Moulmein river.

THE British Admiralty has given notice (No. 768 of 1898) that, on 1st April 1898, a light will be exhibited from the Pilot station, Amherst point.

Amhorst point light will be a sixth order, dioptric, fixed red light, elevated 66 feet above high water, and visible from N.N.E., through east, to S.E., a distance of about 8 miles in clear weather.

Approximate position, lat. 16° 4′ 45" N., long. 97° 33′ 5" E.

(Variation 3º Easterly in 1897.)

B. P. Creach, Comdr., R.I.M., Port Officer of Calculia.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 7.

[Third Publication.]

OHINA, EAST-PE CHI LI STRAIT,

Port Arthur—Alteration in light.

The British Admiralty has given notice (No. 770 of 1897) that, on 20th October 1897, The British Admiralty has given notice (No. 770 of 1897) that, on 20th October 1897, the light shown on the western side of the entrance to port Arthur was altered from fixed white to a sixth order, dioptric, group occulting light, with a period of twenty seconds, thus:—light, fourteen seconds; eclipse, two seconds; light, two seconds; eclipse, two seconds.

It shows the following sectors:—red, from N. 13° E. to the land to the westward; white, from N. 13° E., through north, to N. 55° W.; rad, from N. 55° W. to N. 81° W.; and white from N. 81° W., through west, to S. 40° W.; in clevated 87 feet above the sea, and in clear weather the white light should be visible 8 miles and the red light 5 miles.

The light is shown from a building, 7 feet high, painted white, and situated close to the south-east aide of the old light-house, which is painted black and white in horizontal bands. The keeper's dwelling and boundary wall are painted white.

Approximate position, lat. 38° 47′ 25* N., long. 121° 15′ 25* E. (Variation 4° Westerly in 1897.)

B. P. Caease, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 14th January 1898.

T. H. CLOWES, Under-Scoretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 8. [Third Publication.]

AUSTRALIA-INNER ROUTE.

Shoals south-eastward of Night island.

Notice to Mariners No. 772 of 1897, issued by the British Admiralty, is republished. The following information, relating to the existence of shoals near Lowrie island, has been received from Lieutenant R. W. Glennie, H.M. Surveying Vessel Dart:—

(1) A coral shoal (Parry rock) of very small extent, with a least depth of 51 fathoms on it at low water springs and 9 to 10 fathoms, mud bottom, close around, situated on the "course recommended," in a position with centre of Lowrie island (No. VIII) bearing S. 47° W., distant nearly 2,30 miles; and Bow reef beacon (as shown on Chart No. 2921) S. 45° E.

Approximate position, lat. 13° 15′ δ″ S., long. 143° 36′ 45″ E.

(2) A coral patch of small extent, with a depth of 8 fathoms on it and 10 to 11 fathoms, mud bottom, close around, in a position bearing N. 67° E., distant 5½ cables, from shoal (1), or approximately in lat. 13° 14′ 55° S., long. 143° 37′ 26″ E.

(3) A coral shoal (Howard rock) of very small extent, with a least depth of 42 fathoms on it at low water springs and 9 fathoms, mud bottom, close around, situated on the western side of the fairway, in a position with centre of Louris island (No. VIII) bearing N. 75° W., distant 19; cables; and cape Sidmouth summit (350) S. 9° W.

Approximate position, lat. 13° 17′ 5″ S., long. 143° 36′ 45″ E.

Nove. That portion of the "course recommended" which passes over the 61 fathon sheal has been erased from the Chart.

(Variation 5° Easterly in 1897.)

B. P. CREAGH, Comdr., B.I.M. Port Officer of Calcutta.

Published for general information.

Oscorre, the 14th January 1868.

T. H. CLOWES. Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. Q. [Third Publication.

PACIFIC OCEAN-SANDWICE ISLANDS.

Soundings on banks to the west-north-west. The British Admiralty has given notice (No. 774 of 1897) that information has been received that the undermentioned coundings were obtained by the United States vessel-ofwar Forktown in October 1897 :-

1. FROST BANK :-

Soundings of 63 to 12 fathoms, over a blue coze, blue mud, fine white sand, and rocky bettem, on this bank (originally reported by the vessel E. L. Frost in 1859) between lats. 23° 457′ N. and 23° 45′ N. and longs. 163° 33′ W. and 163° 18′ W. The 12 fathoms is situated approximately in lat. 23° 457′ N., long. 163° 25′ W.

2. A sounding of 47 fathoms, rocky bottom, in a position with Modu Manu (Bird island) bearing S.W. by S., distant 11 miles; or approximately in lat. 23° 10′ N., long. 161° 47′ W.

(Variation 11° Rasterly in 1897.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Oaloutta.

Published for general information.

T. H. CLOWRS. Under-Secretary, Marine Department.

CALGOTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 10.

[Third Publication.] OHINA.

Typhoon and storm signals—Codes for signals.

With reference to Notice to Mariners No. 241, dated 17th December 1897, issued by this Office, the British Admiralty has given further notice (No. 777 of 1897) that further information has been received from the Chinese Government that, in making the typhoon and storm warning signals at the semaphores of the several ports, the flags of Marryat's Code will be used for the numbers, and those of the International Code for the letters only.

B. P. CREAGH, Condr., B.I.M., Port Officer of Cakulta.

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

CALCUTTA, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 11.

[Third Publication.]

PACIFIC OCEAN-SANDWICK ISLANDS.

Hawaii-Exhibition of lights.

The British Admiralty has given notice (No. 779 of 1897) thas a fixed white light, elevated 60 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, framework tower, painted white, and situated on Kouhola point, western aide of Keckes harbour, north coast of Hawaii.

Approximate position, lat. 20° 14% N., long. 155° 46% W.

Also, that a fixed white light, elevated 65 feet above the sea, and visible 10 miles in clear weather, is shown from a wooden, framework tower, painted white situated at Keawemos, southward of Alia point, east coast of Hawaii.

Approximate position, lat. 19° 51' N., long. 155° 62' W.

B. P. CREAGE, Condr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Borretary, Marine Department.

Calcutta, the 14th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MAKINERS-No. 12.

[Third Publication.]

AUSTRALIA-Torres strait-inner route.

(1) Passage through the Great Barrier Roof, near the Howick group.

THE Port Muster, Brisbane, has given notice (No. 20 of 1897) that Captain W. Dawson, of H.M.S. Waterwitch, reports having sounded out the passage through the Great Barrier Reef, which lies between Stapleton (X) Islet (in lat. 14° 19′ 12″ S., long. 144° 51′ 3″ E.) and No. I sandbank.

The passage, which will be known hereafter as "Waterwitch Passage," is clear of dangers and carries a depth of 14 to 19 fathoms.

Vessels proceeding to ees from the Inner Route should pass between Bewick and Ingham Islands, and, having made Stapleton Island, leave it on the starboard hand is mile distant; then steering N. 10° E. (mag.) for 7.4 miles will bring No. 1 sandbank abeam. It is close to the edge of the reef, and should be passed on the starboard hand is mile distant. The passage is 11 miles wide, but the reef on the west side of it should be given a good both, as it was not sounded off. Heavy tide-rips and strong tidal currents are met with in the passage, but on the sandbank side it is always smooth. The northern edge of the reef west of Stapleton Island bears N. 621° W. from Stapleton. The channel between the two is 2.2 miles wide, and quite clear of dangers. Charts affected.—2929, 780 and 2964. Australia Directory, Vol. II, page 348.

(2) Rock of Haughton Island-Howick group.

Also, that a Rock, with 18 feet on it at low-water springs, exists westward of Haughton Island. From it the summit of Howick Island bears N. 63° E. (mag)., distant 2.3 miles. The rock is less than a mile off the recommended track. Charts affected—2922 and 2764.

Australia Directory, Vol. II, page 347.

H. LINDQUIST. Publish 1 for general information.
T. H. Clowes, for Port Officer of Calcutta.

Under-Secretary, Marine Department,

OMOUTTA, the 17th January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 13. Third Publication.]

AUSTRALIA-FRANKLAND TOLANDS.

The islands incorrectly charted.

The Port Master, Brisbane, has given notice (No. 21 of 1897) that the west extreme of Normanby Island (Frankland Islands) is found to be 2 cables further west than shown on Chart No. 2850.

Australia Directory, Vol. II, page 322.

H. LINDQUIST. for Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marin: Department.

CALCUTTA, the 17th January 1898. . .

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 14. [Third Publication.]

AUSTRALIA-CAIRNS HARBOUR-TRINITY BAY.

Fairway beacon with illuminted gauge.

The Port Master, Brisbane, has given notice (No. 22 of 1897) that an automatic clock-face tide guage, illuminated at night, is exhibited from the Fairway Beacon at the outer edge of the bar at Cairns Harbour. The beacon from which False Cape bears 8. 79° 30′ E. and the front leading light 8. 24° W. is placed in a depth of 15 feet at low-water springs, and is 150 feet from the line of lights and beacons marking the centre of the bar cutting. It is

to be left on the port hand when entering.

The tide guage indicates the height of tide above low-water datum from I foot to 11 feet by means of a pointer moving round a clock-face dial looking seaward. The gauge does not indicate below I foot nor above 11 feet, the pointer resting at those points, so that I foot thould be interpreted 1 foot or under and 11 feet as 11 feet and over.

The available depth in the outting will be obtained by adding 12 6 to the height above by the current.

thown by the guage.

The light will be visible in clear weather at a distance of 5 miles, except between the bearings of W. S. W. and S. S. E., between which bearings the direct light is obscured, and the frested clock-face is only visible.

The old red Esteron Ruov has been removed.

The old red Fairway Buoy has been removed. Charts affected.—Nos. 2924 and 2350.
Australia Directory, Vol. II, page 287.

H. LINDQUIST, for Port Officer of Caloutta.

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department.

OALDUTEA, the 17th January 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, FEBRUARY 9, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 33. [First Publication.]

AUSTRALIA-NORTH BARNARD ISLANDS.

A new zixth order flashing light exhibited.

The Portmaster, Brisbane, has given notice (No. 23 of 1897) that a 6th Order Double Flashing White Light is now exhibited from the summit of the South-eastern Island of the North Bernards, the focal plane being at an altitude of 292 feet above high water level.

The light is visible in clear weather at a distance of 16 miles, seaward, between the bearings of approximately N. ‡ E. and S.E. ‡ E. and shows a double flash every 10 seconds.

The structure is 10 feet high and consists of a circular lantern erected on a congrete

base and painted white.

In the event of accident to the electric motor or flashing apparatus a small fixed light will be exhibited.

Geographical position (approx.):-Lat. 17° 40' 45" S., Long. 146° 12' 45" E.: From Admiralty Chart.

Chart affected, No. 2349.

Australia Directory, Vol. II., page 317.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALERTYA, the 2nd February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 20. [Second Publication.]

BAY OF BENGAL-ORISSA COAST.

Outer western Ridge buoy under repairs.

THE Port Officer, False Point, has given notice that the outer western Ridge buoy has been taken ashore for repairs, and that it has been replaced by a fifth class flat topped buoy.

B. P. Canadh, Comde., R.L.M., Port Officer of Calculta.

Published for general information.

CALCUITA, the 25th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 21.

[Second Publication.]

BAY OF BENGAL-BURNA COAST.

Temporary relieving of Baragua flats light-vessel further postponed.

In continuation of Notice to Mariners No. 244, dated 27th December last, the Port Officer, Rangoon, has given notice that the relieving of Baragua flats light-vessel has been further postponed to the 10th February next.

B. P. CREAGH, Comdr., R.LM., Port Officer of Calculta.

Published for general information.

CALOUTTA, the 25th January 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 23.

[Second Publication.]

BAY OF BENGAL-CHITTAGONG COAST.

South Patches-Disappearance of Whistling buoy.

THE Port Officer, Chittagong, has given notice that the Whistling buoy, South Patches, has disappeared.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 26th January 1898.

T. H. Clowis, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 28.

[Second Publication.]

OHINA-PR ORILI STRAIT.

Liqu ti shan lighthouse-Fog signal.

The British Admiralty has given notice (No. 803 of 1897) that, on 20th October 1897, the undermentioned fog signal would be established at Lian ti shan lighthouse:—

During thick or foggy weather, in answer to signals from approaching vessels, a general will be fired three times, with an interval of one minute between two successive reports. Should the vessel's signals continue to be heard, the above signal will be repeated after an interval of fifteen minutes.

Approximate position, lat. 38° 43′ 15" N., long. 121° 8′ 15" R.

B. P. ORRAGH, Comdr., R.I.M.,
Port Officer of Calculia.

Published for general information.

CALCUSTA, the 20th January 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEFARTMENT.

NOTICE TO MARINERS-No. 24.

[Second Publication.]

JAPAN—Korra stratt.

Tsu sima-Sunken rock southward of Hame (Zonnan) sima.

The British Admiralty has given notice (No. 805 of 1897) of the existence of a rock, with a depth of 4½ fathoms on it at low water springs, situated in a position with Ko (Koo) saki lighthouse bearing S. 85° E., distant 2-fo miles; and Mame saki N. 80° E.

Approximate position, lat. 34° 5′ 30" N., long. 129° 8′ 50" E.

(Variation 4º Westerly in 1897.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutts.

Published for general information.

T. H. CLOWES, Under Secretary, Marine Department,

CALGUERA, the 29th January 1898.

NOTICE TO MARINERS-No. 25.

[Second Publication.]

KOREA, SOUTH-WEST COAST-THISTLE ISLAND.

Rocks.

THE British Admiralty has given notice (No. 806 of 1897) of the existence of the undermentioned two rocks

One, which dries at low water, situated midway between the Thistle island marked (406) and the small island next eastward of it. Approximate position, lat. 34° 23' N., long. 126° 02' E.

The other, which also dries at low water situated N.N.W., distant 2 cables, from the last-mentioned small island.

(Variation 4º Westerly in 1897.)

B. P. Caraga, Comdr., a.i.m., Port Officer of Calcutta.

Published for general information.

OALOUTEA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, -- MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 26.

[Second Publication.]

AFRICA, EAST-RED SEA, EASTERN SHORE.

Kamaran approach - Shoal south-east of Rishah island.

The British Admiralty has given notice (No. 808 of 1897) that the extremity of the foul ground south-eastward of Rishah island, where there is a depth of 4% fathoms, is situated with beacon on summit of Rishah island bearing N.W. by N., distant 1% miles.

Approximate position, lat. 15° 9′ 50° N., long. 42° 34′ 20° E.

A depth of 42 fathoms, with the words "Reported 1897" written against it, has been placed on the Admiralty Chart in the above position.

(Variation 4° Westerly in 1897.)

B. P. Cabagh, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information,

OALCUTTA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 27.

[Second Publication.]

AUSTRALIA, BAST COAST-HICHINBROOK CHANNEL.

Alteration in light on Lucinda point.

THE British Admiralty has given notice (No. 809 of 1897) that the light on Lucinda point, which is visible from S. 195 E. to S. 496 E., has been altered in colour from white

Approximate position on Chart No. 2849, lat. 18° 31' 25" S., long. 146° 20' 10" E. (Variation ?" Easterly in 1897.)

B. P. CREAGH, Comdr., R.LM., Port Officer of Caloutta.

Published for general information.

Oalcorra, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 28.

[Second Publication,]

EASTERN ARCHIPELAGO-SUMBANA.

(1) Rocks southward of Madang (Flat island).

The British Admiralty has given notice (No. 811 of 1897) of the existence of a rock, about 21 cables in length, N.N.W. and S.S.E., and half a cable broad, part of which dries at 14'S., long. 117° 18'E. A rock, with a depth of 3 fathoms on it, is situated N. 43° E., intent 11 cables for the cables of the characters. datant 11 cables, from the south part of the above rock.

(2) Doubtful existence of sunken rocks in Balsh strait.

Also, that the two rooks, marked as with loss than 6 feet of water on them, in Salah strait, the western one in approximately lat. 80° 23′ S., long. 117° 27′ E., the other about 14 miles eastward of that position, are not known to the native Pilots, and their existence is represented deathful. considered doutful.

Pending a further search, the letters E. D. have been placed against each of these rook

on the Charts.

(3) Dry sand bank northward of Dangan Besar.

Also, of the existence of a sand bank, which dries, in a position with north-east point of Dangan Besar bearing S. 39° E., distant 175 miles; and Tunah or Raras point, S. 76° W. Depths of 10 to 15 fathoms were found between the sand bank and the rocks northward of Depths of 10 to 15 fathoms were found between the sand bank and the rocks northward of Dangan Besar.

Approximate position, sand bank, lat. 8° 231' S., long. 117° 39' E.

(Variation 2º Easterly in 1897.)

B. P. CREAGH, Comde., R.I.M., Port Officer of Calcutta

Published for general information.

T. H. CLOWES,

CALCUTTA, the 29th January 1898.

Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTIOS TO MARINERS-No. 29.

[Second Publication.]

JAPAN-YEZO.

Sunken rock northward of cape Tomomai (Shiehkoff).

THE British Admiralty has given notice (No. 813 of 1897) of the existence of a rock with a depth of 3 fathoms on it, with 3½ fathoms for a distance of 3 cables northward, and depths of 8 to 10 fathoms around, situated in approximately lat. 44° 22′ 0″ N., long. 141° 38′ 30″ E. 30 E.

Note. The coast, from Tomomai village for about 10 miles southward, has shoel water extending 3 to 6 cables from it. B. P. CREAGH, Comdr., R.I.H.,

Port Officer of Calcutta.

Published for general information.

T. H. CLOWEL

CALCUITA, the 29th January 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 30-| Second Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Temporary alteration in Krishna light vessel and light. THE British Admiralty has given notice (No. 4 of 1898) that, on 28th November 1897, Krishna light vessel (group flashing white light) was temporarily withdrawn, and replaced by the light vessel Martahan, which shows a flashing white light every forty-five seconds, thus: light, five seconds; eclipse, forty seconds.

Approximate position, lat. 15° 36' N , long. 95° 34' E.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. OLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 31st January 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 31.

(Second Publication.)

AUSTRALIA, NORTH COAST-THURSDAY ISLAND HARBOUR.

THE British Admiralty has given notice (No. 6 of 1898) that the rock, with a depth of set on it at low water, on which the street water. 19 feet on it at low water, on which the steam-vessel Duke of Deconshire recently struck, at now named Devonshire rook, is situated now named Devoushire rook, is situated on a bank stretching off Heath point, with

dagstaff a quarter of a mile westward of Heath point bearing S. 63° W., distant 34 cables; and black beacon at western extreme of Thursday island shore reef N. 37° W.

Approximate position, lat. 10° 35′ 40° S., long. 142° 12′ 20° E.

(Variation 5° Easterly in 1897.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

OALCUTTA, the Sist January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 84. [Second Publication.] EASTERN ARCHIPELAGO-LINGA ISLAND.

Light on Jang point exhibited.

Wirm reference to Notice to Mariners No. 16, dated 18th January, issued by this office, the British Admiralty has given further notice (No. 7 of 1898) that on 7th December 1897, a fourth order, group-flashing light, with a period of thirty seconds, showing two flashes in quick succession in each group, was exhibited from Jang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 14½ S., long. 104° 57½ B.

B. P. OREAGE, Comdr., B.I.M. Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 81st January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 15. [Third Publication.] PACIFIC OCEAN-DIANA SHOAL

An unsuccessful search.

Notice No. 790 of 1897 issued by the British Admiralty is republished.
Information has been received from Captain A. Mostyn-Field, H.M. Surveying Vessel Penguin, that, in August 1897, he sounded over an area embracing 80 miles in longitude and nearly 40 miles in latitude, in the vicinity of Diana shoal, originally reported in 1852 as baving a depth of 6 feet on it, and as being situated in lat. 8° 40° N., long. 157° 20° W. The Penguin spent 5 days in the search, obtaining soundings of from 3,560 to 2,946 fathems at distances of 7 to 10 miles apart, and observing no indication of a shoal in any part of the locality.

In view of the above, and the fact that schooners have plied for many years between Honolulu and Fanning island over the position of the shoal, and that it has not been seen that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the fact that the f tines the first vague report, Diana shoal has been expunged from the Admiralty Charts.

H. LINDQUIST, for Port Officer of Unioutia,

Published for general information. CALOUTTA, the 18th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 16.

[Third Publication.]

EASTERN ARCHIPELAGO-LINGA ISLAND.

Light on south-east point,

The British Admiralty has given notice (No. 797 of 1897) that, about the end of November 1897, a fourth order, group-flushing light, showing two flashes in quick succession in each group, was exhibited from Eung or Diang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 14½ S., long. 104° 57½ E. Further Notice will be given when more particulars are known.

Norg .- The correct name for the point on which the lighthouse stands is Jang and not Beng or Diang. The Admiralty Charts have now been amended.

H. LINDQUIST. for Port Officer of Calculta.

Published for general information.

T. H. CLOWES, OMOUTTA, the 18th January 1898. Under-Secretary, Marine Department.

NOTICE TO MARINERS No. 17.

Third Publication.]

AFRICA, EAST COAST-MOZEMBIQUE.

Lloyd's Signal station at Fort St. Sebastian.

THE British Admiralty has given notice (No. 801 of 1897) that information has been received from Lloyd's, dated 16th December 1897, that a Signal station has been established at fort St. Sebasatian, north-east end of Mozambique island.

Approximate position lat. 15° 0′ 45" S., long. 40° 44' 45" E.

H. LANDOUIST, for Port Officer of Valentia,

Published for general information.

Calcura, the 18th January 1898.

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T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 18.

[Third Publication.]

BAY OF BENGAL-CHITAGONG COAST.

River marks and buoys replaced.

With reference to Notice to Mariners No. 210, dated 1st November 1897, the Port Officer, Chittagong, has given further notice that all the river marks and huoys that were either destroyed or were cut of position by the late cyclone have been replaced in position.

B. P. CREAGE, Comde., R.I.R., Port Officer of Calcutta.

Published for general information.

CALCUTES, the 24th January 1898.

T. H. OLOWBS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

ROTICE TO MARINERS-No. 19.

[Third Publication.

BAY OF BENGAL-CHITTAGONG COAST.

Blue lights at Kutubdia lighthouse.

Wirm reference to Notice to Mariners No. 209, dated 30th October 1897, the Port Officer, Chittegong, has given further notice that on and after the 1st March next, blue lights will be burnt from the Kutubdia lighthouse every half hour. The light is visible 17 miles to seeward in clear weather.

B. P. CHEAGH, Comdr., L.L., Port Officer of Calcutta.

Published for general information.

T. H. CLOWBS. Under-Secretary, Marine Department.

CALOUTER, the 24th January 18'8.



APPENDIK TO

The Calcutta Gazette.

WEDNESDAY, FEBRUARY 16, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 34. [First Publication.]

BAY OF BENGAL-ORISSA COAST.

New Elfin Fairway buoy shifted; and Dinga flat extended.

The Port Officer, Chandbally, has given notice that the New Elfin Fairway buoy has been shifted 3,000 feet W. by N. of its former position into 10 feet reduced; flagstaff N. 70° W. from fairway buoy. There is now 1'9" on the New Elfin Bar.

The centre Elfin black buoy has been shifted 50 feet east of its former position into 5 feet reduced. Matters of vessels making the entrance of Balasore river cid New Elfin channel should come in on a course of N. 40° 30′ W. magnetic from Fairway buoy transit marks. The new Elfin transit marks have been shifted from their former position on the bearing in line N. 40° 30′ W. The breaking reach has been shrow that the position of the bearing in line N. 40° 30′ W. The breaking reach has been shrow that the position of the bearing in line N. 40° 30′ W. The breaking reach has been shrowered by a white clabs bearing in line N. 40° 30' W. The backing mark has been surmounted by a white globe as this shows up much betier with the jungle forming a dark back ground.

The old channel is shoaling up, and there is now on the outer bar 6 inches, and the inner

The Dings flat has extended considerably and encroaches into the channel. Masters should keep well into the right bank as the flat is very steep, and should open Whoorguddi Reach elightly before crossing. Small bamboo marks have been erected for this purpose.

H. LINDQUIST, for Port Officer of Calcutta.

Published for general information.

California, the 9th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 85.

(First Publication.) AUSTRALIA-PORT PRIMETP.

Lights exhibited in the river Yarra.

The British Admiralty has given notice (No. 10 of 1898) that the undermentioned lights are exhibited in the river Yarrs, in addition to these shown from the 4 gas buoys hoored on the port side of the channel between the entrance and Williamstown steam

- 1. A solide light is shown from a beacen tereoted on the morth (starboard) side of the entrance of the river; and a fed light from a beacon on the south (port) side of the entrance. These replace the gas buoys previously moored in those
- Approximate position, white light, lat. 87° 51' 15' S., long. 144° 54' 40" E. 2. A white light, on the river bank nearly opposite Williamstown steam ferry, in a position with Sandridge (port Melbourne) Railway pier lighthouse bearing S. 85° E., distant 1515 cables; and State school, North Williamstown,

- 3. Eight white lights on the same bank of the river as light (2), situated respectively on the following bearings and distances from that light:—

c. N. by W. § W., distant $2^{-1}c$ cables; close to the bank.
b. N. by W. § W., distant 4 cables; close to the bank.
c. N. § W., distant $5^{-1}c$ cables; close to the bank.
d. N. ‡ W., distant 7 cables; close to the bank.
c. N. ‡ E., distant $8^{-1}c$ cables; at the extremity of the southern timber

jetty.

N. † E., distant 9-7 cables; at the extremity of the northern timber

jetty.

g. N. by E. & E., distant 11 to cables; at the west end of the sheet piling.

h. N. E. & N., distant 18 to cables; on the bank, nearly opposite the Harbour Trust workshops.

A red light on the north side of the entrance to Stony creek, in a position with the centre of the Cement works, on the south side of Stony creek, bearing W. by N. 1 N., distant 2 cables; and centre of Smelting works N. by

E. 2 K.

A red light on the east side of the entrance to Saltwater river, in a position with centre of Smelting works bearing W. 1 N., distant 12 cables; and extremity of northern timber jetty S.S.W. 1 W.

Two white lights on the same bank as light (5), on the following bearings and distance from that light :-

a. N. E. by E. ½ E., distant 8 cables; close to the bank.
b. N. E. by E. ½ E., distant 6 cables; close to the bank.
c. A red light, in a position bearing E. by N. ½ N., distant 9½ cables; from light (5); and at the extremity of the point castward of the Harbour Trust workshops.

(Variation 8ª Rasterly in 1898.)

H. Landquist, for Port Officer of Calcutta,

Published for general information.

T. H. CLOWES,

OALCUTTA, the 11th February 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 86.

[First Publication.]

BAY OF BENGAL-BURNA COAST.

Gulf of Martaban-Buoys westward of Balugyun and Goodwin sands, Moulmoin approach. THE British Admiralty has given notice (No. 12 of 1898) that the undermentioned buoys have been placed westward of Balugyun and Goodwin sands:—

1. A can buoy, painted black and numbered 1, moored on the north side of the entrance to the buoyed channel through Balugyun sands, in a position with conspicuous tree on south coast of Balugyun bearing N.N.E. & E., distant 27 miles; and Wai gyee Chaung beacon E. by S. & S.

Approximate position on Plan No. 1845, lat. 16° 12' 5" N., long. 97° 29' 5' E.

A conical buoy, painted red, numbered 1 and surmounted by a pole and basis, moored on the south side of the entrance to the buoyed channel through Balugyun sands, in a position with Balugyun conspicuous tree bearing N. by E. † E., distant 2 for miles; and Wai gyee Chaung beacon E. by S. † S.
 A conical buoy, painted red and named Balugyun sand buoy, moored in a position with Balugyun conspicuous tree bearing N. † E., distant 4 miles; and Wai gyee Chaung beacon E. ‡ S.
 A conical buoy, painted red and named Goodwin sand buoy, moored is a position

4. A conical busy, painted red and named Goodwin sand busy, moored is a position with Balugyun conspicuous tree bearing N. ‡ E., distant 6 to miles; and Wai gyee Chaung beacon E. by N. ‡ N.

Note.—The buoy moored on the western side of the Patch, about W. by N. i N. from Amherst point, is now a conical buoy, painted red and surmounted by pole and basket.

Caution.—The channel north of Balugyun sand is marked with red buoys on the south side and black buoys on the north side. As stated on the chart, this is the only available channel, but it has not been surveyed. Pilots are necessary and can be obtained at Amherst.

(Variation 3° Easterly in 1898.)

for Port Officer of Calcutts.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department-

CALCUTTA, the 11th February 1898.

NOTICE TO MARINERS-No. 37.

[First Publication.] JAPAN-NIPON.

Aleumi peninsula-Oyama light discontinued.

The British Admiralty has given notice (No. 14 of 1898) that Oyama light (fixed red), which was discontinued (temporarily) in 1895, has not since appeared in the Japanese Light List, and it has consequently been removed from the Admiralty publications.

Approximate position, lat. 34° 35′ 30″ N., long. 137° 9″ F.

> H. LINDQUIST. for Part Officer of Calcutta.

Published for general information.

T. H. CLOWES. Under-Secretary, Marine Department.

CALCUTTA, the 11th February 1848.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 38.

[First Publication.]

BAY OF BENGAL-CHITTAGONG COAST,

Okitlagong river-Depth of water found in the channels.

The Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 7th February and reduced to zero:—

Track No. I-Outer bar-				Ft. L	l.
Disc in the centre of Diam Disc on Tripod cask and b	3011			11 3	-
Track No. II-Inner bar-	7G-LL 1 / 4	***	***	10)
Disc on Diamond Disc on Tripod cask and	hall	***	***	10	
Track No. III-		***	844	10 ()
Tripod on cross and ball Track No. IV-	***	* * *	948	19 ()
Triangle on tripod, cask as	Ilad ba	144	***	20 (
Track No. V - Guptakhally oron	-				
Centre	4 615	104	***	16 0	
	* ***	444	4.0	16 0)
Tripod on diamond	f 860 1	101	444	15 0	
		fo		indaut <i>ficer of</i>	er, <i>Caloniia.</i>

Published for general information.

T. H. CLOWRS, Under-Socretary, Marine Department.

OALCOTTA, the 11th February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 89. [First Publication.]

BAY OF BENGAL-ORISSA COAST.

Outer western Ridge buoy replaced in position.

With reference to Notice to Mariners No. 20, dated 25th altimo, issued by this office, the Port Officer, False Point, has given further notice that the outer western Ridge buoy has been replaced in position; and the 5th class flat-topped buoy withdrawn.

H. LANDQUIER, for Port Officer of Cukutla.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcures, the 14th February 1888.

MOTIOE TO MARINERS-No. 88. [Second Publication.]

AUSTRALIA-NORTH BARNARD ISLANDS.

id row which drawn pleaking light eximitived.

The Portugueter, Brisbane, has given notice (No. 23 of 1897) that a 6th Order Double Flashing White Light is now exhibited from the sammit of the South-easiern Island of the North Barnards, the feeal plane being at an altitude of 292 feet above high water level

The light is visible in ulear weather at a distance of 16 miles, seaward, between the bearings of approximately N. 1 E, and S.E. 1 E. and shows a double flash every 10 seconds.

The structure is 10 feet high and consists of a circular lantern erected on a concrete

base and painted white.

In the event of accident to the electric motor or flashing apparatus a small fixed light will be exhibited.

Geographical position (approx.):-Lat. 17° 40′ 45° S., Long. 146° 12′ 45° E.: From Admiralty Chart. Ohart affected, No. 2349.

Australia Directory, Vol. II., page 317.

B. P. CREAGH, Comdr., B.I.M. Port Office by Galcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCULTA, the 2nd February 1898.

government of bengal—marine department.

NOTICE TO MARINERS-No. 20.

[Third Publication.

BAY OF BENGAL-ORIESA COAST.

Outer western Ridge buoy under repairs.

The Port Officer, False Point, has given notice that the outer western Ridge busy has been taken ashere for repairs, and that it has been replaced by a fifth class flat topped busy.

B. P. ORESON, Conde., R.LM., Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 25th January 1898.

T. H. Cribbins, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 21.

[Third Publication.]

BAY OF BENGAL-BURNA COAST.

Temporary relieving of Baragua flate light-vessel further postpened.

In continuation of Notice to Mariners No. 244, dated 27th December last, the Port Officer, Rangoon, has given notice that the relieving of Baragua flats light-vessel has been further postponed to the 10th February next.

B. P. CREAGE, Comer., R.I.M. Port Officer of Calculta.

Published for general information.

Caloura, the 25th January 1898.

T. H. CLOWES, Under-Beeretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 23.

Third Publication.]

BAT OF BENGAL-ORITADONG COAST.

South Palohes-Disappearance of Whistling buoy.

THE Port Officer, Chittagong, has given notice that the Whistling bucy, South Patches, has disappeared.

B. P. Cazach, Comdr., a.t.M., Port Officer of Calcutta.

Published for general information.

CALCULTA, the 26th January 1898.

T. H. OLOWES, Under Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 28.

[Third Publication.] CHINA-PE CHILI STRAIT.

Lian ti shan lighthouse Fog signal.

The British Admiralty has given notice (No. 803 of 1897) that, on 20th October 1897, the undermentioned fog signal would be established at Liau ti shan lighthouse:—

During thick or foggy weather, in answer to signals from approaching vessels, a gun will be fired three times, with an interval of one minute between two successive be repeated after an interval of fifteen minutes.

Approximete position, lat. 38° 43' 15" N., long. 121° 8' 15" E.

B. P. CEBAGH, Comdr., R.I.M., Port Officer of Calcutia.

Published for general information.

CALCUTTA, the 29th January 1898.

T. H. CLOWER, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 34.

[Third Publication.] JAPAN-Korea strait.

Tru sima-Sunken rook southward of Mame (Zonzon) sima.

THE British Admiralty has given notice (No. 805 of 1897) of the existence of a rock, with a depth of 41 fathoms on it at low water springs, situated in a position with Ko (Koo) aki lighthouse bearing S. 85° E., distant 2.5° miles; and Mame saki N. 80° E.

Approximate position, lat. 34° 5′ 30° N., long. 129° 8′ 50° E.

(Variation 4º Westerly in 1897.)

B. P. CREAGH, Comdr., B.I.K., Port Officer of Calcutta.

Published for general information.

OLLOUTEL, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department

GOVERNMENT OF BENGAL, -MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 26.

[Third Publication.]

KOREA, SOUTH-WEST COAST-THISTLE ISLAND.

Rooks.

Ter British Admiralty has given notice (No. 806 of 1897) of the existence of the undermentioned two rocks:-

One, which dries at low water, situated midway between the Thistle island marked (406) and the small island next eastward of it.

Approximate position, lat. 34° 23' N., long. 126° 93' E.

2. The other, which also dries at low water situated N.N.W., distant 2 cables, from the last-mentioned small island.

(Variation 4° Westerly in 1897.)

B. P. CREAGE, Comde., R.L.M., Port Officer of Calcutta.

Published for general information.

Cilcurri, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 26.

[Third Publication.]

AFRICA, BAST-RED SEA, BASTERN SHORE.

Ramaran approach - Shoal south-east of Rishah island.

The British Admiralty has given notice (No. 808 of 1897) that the extremity of the find ground south-eastward of Rishah island, where there is a depth of 44 fathoms, is aituated him beacon on summit of Rishah island bearing N.W. by N., distant 170 miles. Approximate position, lat. 15° 9' 50° N., long. 42° 34' 20" E.

A depth of 47 fathous, with the words "Reported 1897" written against it, has been placed on the Admiralty Chart in the above position.

(Variation 4º Westerly in 1897.)

B. P. CERAGH, Comdr., R.I.M., Port Officer of Calculta.

· Published for general information.

CALOUTTA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 27. [Third Publication.]

AUSTRALIA, EAST COAST-HIGHINBROOK CHANNEL.

Atteration in light on Lucinda point.

THE British Admiralty has given notice (No. 809 of 1897) that the light on Lucinder point, which is visible from S. 198 E. to S. 490 E., has been altered in colour from white in red.

Approximate position on Chart No. 2349, lat. 18° 31' 25" S., long. 146° 20' 10" E.

(Variation ?" Easterly in 1897.)

B. P. CREAGH; Comdr., R.I.M., Port Officer of Calcutta,

Published for general information.

CALCUTTA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 28. [Third Publication.]

EASTERN ARCHIPELAGO -- SUMBANA.

(1) Rocks southward of Madang (Flat island).

THE British Admiralty has given notice (No. 811 of 1897) of the existence of a rook, about 25 cables in length, N.N.W. and S.S.E., and half a cable broad, part of which dries at low water, situated about S. by W. 4 W. from Madang west point, or approximately in lat. 8° 14′ S., long. 117° 18′ E. A rock, with a depth of 3 fathoms on it, is situated N. 43° E., distort 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the court of the about 11 cables from the cable and 12° E. distant 12 cables, from the south part of the above rock.

(2) Doubtful existence of sunken rocks in Salsh strait.

Also, that the two rocks, marked as with less than 6 feet of water on them, in Saleh strait, the western one in approximately lat. 80° 23′ S., long. 117° 27′ E., the other about 12 miles eastward of that position, are not known to the native Pilots, and their existence is approximately dentited.

considered doutful. Pending a further search, the letters E. D. have been placed against each of these rock

on the Charts.

(8) Dry sand bank northward of Dangan Besar.

Also, of the existence of a sand bank, which dries, in a position with north-east point of Dangan Besar bearing S. 39° E., distant 175 miles; and Tunah or Raras point, S. 75° W. Depths of 10 to 15 fathoms were found between the sand bank and the rocks northward of Dangan Besar. Dangan Besar.

Approximate position, sand bank, lat. 8° 23% S., long. 117° 39' E.

(Variation 3° Easterly in 1897.)

B. P. ORRAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

CALOUTTA, the 29th January 1898.

NOTIOR TO MARINERS-No. 89. [Third Publication.]

JAPAN-YEZO,

Sunken rook northward of cape Tomomai (Shishkoff).

The British Admiralty has given notice (No. 818 of 1897) of the existence of a rock with a depth of 3 fathoms on it, with 31 fathoms for a distance of 3 cables northward, and depths of 8 to 10 fathoms around, situated in approximately lat. 44° 22° 0° N., long. 141° 38° 80" E

Note.—The coast, from Tomomai village for about 10 miles southward, has shoal water extending 3 to 6 cables from it.

B. P. CREAGH, Comdr., B.I.M.,

Port Officer of Calcutta. Published for general information.

CALCUTTA, the 29th January 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 80.

[Third Publication.]

BAY OF BENGAL-BURMA COAFT.

Gulf of Martalan-Temporary alteration in Krishna light vessel and light.

The British Admiralty has given notice (No. 4 of 1898) that, on 28th November 1897, Krishna light vessel (group-flashing white light) was temporarily withdrawn, and replaced by the light vessel Martaban, which shows a flashing white light every forty-five seconds, thus: light, five seconds; colipse, forty seconds.

Approximate position, lat. 15° 36' N , long. 95° 34' E.

B. P. CREAGR, Condr., B.1.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 31st January 1898.

T. H. CLOWES, Under-Secretary, Murine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 31.

[Third Publication.]

AUSTRALIA, NOBIH COAST-THURSDAY ISLAND HARBOUR.

Sunken rock northward of Heath point.

The British Admiralty has given notice (No. 6 of 1898) that the rock, with accepth of 19 feet on it at low water, on which the steam-vessel Duke of Dovonshire recently struck, and now named Devonshire rock, is situated on a bank stretching off Heath point, with the flagstaff a quarter of a mile westward of Heath point bearing 8.63° W., distant 3° cables; and black beacon at western extreme of Thursday island shore reef N. 37° W.

Approximate position, lat. 10° 35′ 40″ S., long. 142° 12′ 20″ E. (Variation 5° Easterly in 1897.)

B. P. Orbagh, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES,

CALCUTTA, the 51st January 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 82.

[Third Publication.]

EASTERN ARCHIPELAGO-LINGA ISLAND.

Light on Jang point exhibited.

With reference to Notice to Mariners No. 16, dated 18th January, issued by this office, the British Admiralty has given further notice (No. 7 of 1898) that on 7th December 1897, a fourth order, group-flashing light, with a period of thirty seconds, showing two flashes in quick succession in each group, was exhibited from Jang point, Linga island.

Approximate position on Chart No. 1789, lat. 0° 141 S., long. 104° 571 E.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Scoretary, Marine Department.

CALCUITA, the Slat January 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, FEBRUARY 23, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL - MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 40.

[First Publication.]

EASTERN ARCHIPELAGO-CBLEBES, SOUTH COAST.

Sunken rock south-westward of Cape Bulu Bulu.

THE British Admiralty has given notice (No. 22 of 1898) that the Master of the Netherlands Indice steam-vessel Japara reports the existence of an isolated rock, with a depth of 16 feet on it, situated about one mile off shore in a position with Malasoro point in line with Jeneponto head bearing about W. by N. ² N.; and point Petang about N.E. ² E.

Approximate position, lat. 5° 42′ 50" S., long. 119° 44′ 25" E.

(Variation 2º Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calcutte.

Published for general information.

CALCUITA, the 15th February 1898.

T. H. OLOWES Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 41.

[First Publication.]

EASTERN ARCHIPELAGO-LONSON.

Light at Ampenan.

The British Admiralty has given notice (No. 23 of 1898) that, on 6th January 1898, a sixth order, fixed white light, elevated 41 feet above the sea, and visible 11 miles in clear weather, was shown from a white, frame-work, iron support, 42 feet in height, with the keeper's dwelling (white, red roof) adjoining, situated in a position bearing N.E. by N., distant 68 yards, from Ampenan flagstaff, west coast of Lombok.

Approximate position, lat. 8° 34' 15° S., long. 116° 3' 55° E.

(Variation 2º Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calcutta,

Published for general information.

CALGUITA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 42.

[First Publication.]

PACIFIC OCEAN-PHILIPPINE INLANDS-MINDANAO.

Iligan bay - Amended particulars of coral patch, castward of point Bombon.

THE British Admiralty has given notice (No. 25 of 1898) that an examination has recently been made of the danger marked "Rocky bank," &c., about 12 miles eastward of point Bombon, west side of Higan bay, with the undermentioned result :-

This patch, consisting of coral and white sand, is about 3 cables in length, northwest and south-east, within the 5-fathom line, and 2 cables broad, with a least depth of 16 feet on it, and soundings of upwards of 50 fathoms about a mile of around.

It is situated about 21 miles, N.E. by N., from the position in which it has hitherto been shown on the charts, or approximately in lat. 8° 40' N., long. 123° 51' E.

(Variation 1º Easterly in 1898.)

H. Landquier, for Port Officer of Osloutie.

Published for general information.

CALGUITA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 43.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

Light-vessel " Krishna" resumed her station.

In continuation of Notice to Mariners No. 242, dated 16th December 1895, issued by this Office, a further telegraphic communication has been received from the Port Officer, Rangoon, stating that the Krishna shoal light-vessel has resumed her station exhibiting original light. The temporary light-vessel has been withdrawn.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calculta.

Published for general information.

T. H. Chowse,

Calcurra, the 21st Rebruary 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, - MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 44.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

CAUTION - Position of wreck of steamer " Medusa."

A TELEGRAPHIC communication has been received from the Port Officer, Rangoon, stating that the Commander of the Royal Indian Marine steamer Minto reports that the wreck of the steamer Meduca lies sunk from 6 to 8 fathoms water bearing south 27° east where the scenarior measure has runk from 0 to 3 lathoms water bearing south 27 cost true, from Table island light-house, distance 9 cables approximate, and 5 cables approximate from the shore; fore and after ends submerged, bridge above water, foremast standing. Mariners are warned accordingly.

B. P. CREAGE, Comdr., L.I.N., Port Officer of Calcutta.

Published for general information.

T. H. CLOWAS,

Outcours, the 21st February 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 45.

[First Fublication.]

INDIAN OCEAN-MALACCA STRAITS.

A shoal not marked on Admiralty chart.

THE Master of the ship Tinto Hill reports the existence of a shoal not marked on Admiralty chart for Malacca Strait, number of chart being 1350, sheet No. 2, having small corrections up to 1st January 1896 and large corrections to December 1885. He also discovered a narrow strip of black sand about 50 fathoms long N.N.W. and S.S.E. (with see birds picking on it) about a mile off; tacked ship to N. by E. \(\frac{3}{4}\) E. when the following bearing were taken:—"Farcelar Hill" E. \(\frac{1}{4}\) N., One fathom bank light-house N. \(\frac{1}{4}\) E. and the ridge of sand forming shoal W. by S. § S.; ship's head by standard compass N. by E. § E.; error 2° 26' easterly; tide flowing and setting S.E. by S. and running 2½ knots, more or less. Immediately ship was heading off took east of the lead and had no bottom at 25 fathoms. Weather clear and fine. Wind variable.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Culoutta.

Published for general information.

CALCUITA, the 21st Fibruary 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 34. (Second Publication.) BAY OF BENGAL-ORISEA COAST.

New Elfin Fairway buoy shifted; and Dinga flat extended.

The Port Officer, Chandbally, has given notice that the New Elfin Fairway buoy has been shifted 3,000 feet W. by N. of its former position into 10 feet reduced; flagstaff N. 70° W. from fairway buoy. There is now 1′ 9″ on the New Elfin Bar.

The centre Elfin black buoy has been shifted 50 feet east of its former position into 5

feet reduced. Masters of vessels making the entrance of Balasore river vid New Elfin channel should come in on a course of N. 40° 30′ W. magnetic from Fairway buoy transit marks. The new Elfin transit marks have been shifted from their former position on the bearing in line N. 40° 30′ W. The backing mark has been surmounted by a white globe at this shows up much better with the jungle forming a dark back ground.

The old channel is shoaling up, and there is now on the outer har 6 inches, and the inner law at law water.

ber is dry at low water.

The Dings flat has extended considerably and encroaches into the channel. Masters should keep well into the right bank as the flat is very steep, and should open Whoorguddi Beach slightly before crossing. Small bamboo marks have been erected for this purpose.

H. LINDQUIST.

Published for general information.

OALGUTTA, the 9th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 86.

[Second Publication,] AUSTRALIA-PORT PHILLIP.

Lights exhibited in the river Yarra.

The British Admiralty has given notice (No. 10 of 1895) that the undermentioned lights are exhibited in the river Yarra, in addition to those shown from the 4 gas buoys moored on the port side of the channel between the entrance and Williamstown steam ferry:-

1. A white light is shown from a beacon erected on the north (starboard) side of the entrance of the river; and a red light from a beacon on the south (port) side of the entrance. These replace the gas buoys previously mocred in those positions.

Approximate position, white light, lat. 37° 51′ 15″ S., long. 144° 54′ 40″ E.

- A white light, on the river bank nearly opposite Williamstown steam ferry, in a position with Sandridge (port Melbourne) Railway pier lighthouse bearing S. 85° E., distant 1516 cables; and State school, North Williamstown, 8. 9° W.
- 3. Eight white lights on the same bank of the river as light (2), situated respectively on the following bearings and distances from that light :-

a. N. by W. § W., distant 2₇₀ cables; close to the bank.
b. N. by W. § W., distant 4 cables; close to the bank.
c. N. § W., distant 5₇₀ cables; close to the bank.
d. N. § W., distant 7 cables; close to the bank.
e. N. § E., distant 8₇₀ cables; at the extremity of the southern timber interest.

jetty.

N. § E., distant 9 to cables; at the extremity of the northern timber

jetty.

g. N. by E. & E., distant 11 4 cables; at the west end of the sheet piling.

h. N. E. & N., distant 18 3 cables; on the bank, nearly opposite the

4. A red light on the north side of the entrance to Stony creek, in a position with the centre of the Cement works, on the south side of Stony creek, bearing W. N. 1 N., distant 2 cables; and centre of Smelting works N. by E. & E.

A red light on the east side of the entrance to Saltwater river, in a position with centre of Smelting works bearing W. 1 N., distant 12 cables; and extremity of northern timber jetty S.S.W. 1 W.

Two white lights on the same bank as light (5), on the following bearings and

distance from that light :-

a. N. E. by E. 2 E., distant 3 cables; close to the bank.
b. N. E. by E. 2 E., distant 6 cables; close to the bank.
c. A red light, in a position bearing E. by N. 4 N., distant 97 cables; from light (5); and at the extremity of the point eastward of the Harbour Trust workshops.

(Variation 8° Resterly in 1898.)

H. LINDQUIET, for Port Officer of Calcutta

Published for general information.

T. H. CLOWES,

CALCUTYA, the 11th Pebruary 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 56.

[Second Publication.]

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Buoys westward of Balugyun and Goodwin sands, Moulmein approach. THE British Admiralty has given notice (No. 12 of 1898) that the undermentioned buoys have been placed westward of Balugyun and Goodwin sands:—

1. A can buoy, painted black and numbered 1, moored on the north side of the entrance to the buoyed channel through Balugyon sands, in a position with conspicuous tree on south coast of Balugyun bearing N.N.E. ‡ E., distant 270 miles; and Wai gyee Chaung beacon E. by S. ‡ S.

Approximate position on Plan No. 1845, lat. 16° 12' 5" N., long. 97° 29' 5" E.

2. A conical buoy, painted red, numbered I and surmounted by a pole and baket, moored on the south side of the entrance to the buoyed channel through Balugyun sauds, in a position with Balugyun conspicuous tree bearing N. by

E. 1 E., distant 2 to miles; and Wai gyeo Chaung beacon E. by S. 1 S.

A conical buoy, painted red and named Balugyun sand buoy, moored in a position with Balugyun conspicuous tree bearing N. & E., distant 4,8 miles; and Wai gyee Chaung beacon E. & S. 3.

4. A conical buny, painted red and named Goodwin sand buoy, moored in a position with Balugyun conspicuous tree bearing N. ½ E., distant 6. miles; and Wai gyee Chaung beacon E. by N. ½ N.

Nors.—The buoy moored on the western side of the Patch, about W. by N. ½ N. from Amherst point, is now a conical buoy, painted red and surmounted by pole and basket.

OAUTION.—The channel north of Balugyun sand is marked with red buoys on the south side and black buoys on the north side. As stated on the chart, this is the only available

side and black buoys on the north side. As stated on the chart, this is the only available channel, but it has not been surveyed. Pilots are necessary and can be obtained at Amhant (Variation 3° Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calcutta.

Published for general information.

T. H. OLOWINS Under-Secretary, Marine Department.

H. LINDQUIST,

CALCUTTA, the 11th February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 37.

[Second Publication.] JAPAN-NIPON.

Atsumi psninsula-Oyama light discontinued.

THE British Admiralty has given notice (No. 14 of 1898) that Oyama light (fixed red), which was discontinued (temporarily) in 1895, has not since appeared in the Japanese Light Light and it has consequently becomes a since appeared in the Japanese Light List, and it has consequently been removed from the Admiralty publications.

Approximate position, lat. 34° 35′ 30″ N., long. 137° 9′ 0″ E.

for Port Officer of Calcutta.

Published for general information. T. H. CLOWES. Under-Secretary, Marine Department.

CALCUTES, the 11th February 1858.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 38.

[Second Publication.]

BAY OF BENGAL-CRITTAGONG COAST.

Chittagong river -- Depth of water found in the channels.

THE Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 7th February and reduced to zero:—

				A world	TAUTHOR	ores or D
Track No. I-Outer bar-					Ft.]	In.
Disc in the centre of l Disc on Tripod cask a	Diamond and	the Tripod	oask and	buoy	Щ	3
Track No. II-Inner bar- Disc on Diamond		114	101	***	10	0
Disc on Tripod cask a	nd hall	* 1 4	***		10	
Track No. III— Tripod on gross and be		***	***		10	0
Track No. IV-		100	•••	449	19	0
Triangle on tripod, cast Track No. V—Gaptakhally Old marks	erossing—	100	***	***	20	0
Comban	***	***	***		16	0
Tripod on diamond	***	141	***		9.75	
w-Per or stranging	194	144	***	144	15	0
Pub	lished for gen	eral inform	Jor .	H. I. Port O	INDQU floer 9	ist, Calcutta,
	-			1 77 -		

T. H. CLOWBS, Under-Secretary, Marine Department,

CALCUTTA, the 11th February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 80.

(Second Publication,)

BAY OF BENGAL-ORISSA COAST.

Outer western Ridge buoy replaced in position.

Wire reference to Notice to Mariners No. 20, dated 25th ultimo, issued by this office, the Port Officer, False Point, has given further notice that the outer western Ridge buoy has been replaced in position; and the 5th class flat-topped buoy withdrawn.

H. Landquier, for Port Officer of Calcutta.

Published for general information.
T. H. Clowne,

Under-Secretary, Marine Department.

CALOUTEA, the Lith February 1898

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 38.

[Third Publication.]

AUSTRALIA-NORTH BARNARD INLANDS.

A new eigth order flashing light exhibited.

The Portmaster, Brisbane, has given notice (No. 23 of 1897) that a 6th Order Double Flashing White Light is now exhibited from the summit of the South-eastern Island of the North Barnards, the focal plane being at an altitude of 292 feet above high water level.

The light is visible in clear weather at a distance of 16 miles, seaward, between the bearings of approximately N. ½ E. and S.E. ½ E. and shows a double flash every 10 seconds.

The structure is 10 feet high and consists of a circular lantern erected on a concepte

base and painted white.

In the event of accident to the electric motor or flashing apparatus a small fixed light

Geographical position (approx.):—Let. 17° 40′ 45″ S., Long. 146° 12′ 45″ E.: From

Ohart affected, No. 2849.

Australia Directory, Vol. II., page 317.

B. P. CERAGE, Comde., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department,

OALOUTTA, the 2nd February 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MARCH 2, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DPARTMENT.

NOTICE TO MARINERS - No. 46.

[First Publication.]

AUSTRALIA-BRISBANE RIVER.

Increased depth of water in the dredged channels of the Brisbane river, and corresponding alleration of Tide signals from the Pile light-house.

THE Port Master, Brisbane, has given notice (No. 1 of 1898) that, on and after the 16th instant, the available depth in the dredged outlings of the Brisbane River will be 16 feet at low water.

Tide signals will be made from the Pile Light-house in accordance with the following amended code:—

Day Signals,	De	pth in Cu (Feet).	time	Night Bignais.
Flag East Flag West Ball East Ball West Cone East Cone West Inverted cone East Inverted cone West Ball East, cone West Ball East, inverted cone Cone East, inverted cone Cone East, inverted cone Cone West, inverted cone Cone East, one West	Vest East	(Feet). 16 16 17 17 18 18 19 19 20 20 21 21 22	000 114 Rep 111 110 110 110 110 110 110 110 110 11	White East, White West. Red East. Red West. Green East. Green West. White East, red West. White West, red East. Red East, green West. Red East, green East. Green East, white West. Green West, white East. White East, white West. Red East, red West. Red East, red West.
Inverted cone East, invert West Ball East, ball West Flag East, flag West	ed cons	23 23 24 24 24	*** ***	Green East, green West. Two White vertical West. Red over white West. Green over white West.

It will be noted that no alteration is to be made in the arrangement of the symbols, the changes made being in the depth corresponding to each signal.

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department,

CALCUTEA, the 23rd February 1898. . .

NOTICE TO MARINERS-No. 47.

[First Publication.] AUSTRALIA

New Caledonian submarine cable.

THE Portmester, Brisbane, has given notice (No. 2 of 1898) that, in connection with the repairs to this Cable, there are now two buoys, surmounted with Flag and Staff, laid in the following positions, viz.:-

Latitude 24° 17' 15" South. Longitude 153° 12' East.

Latitude 24° 17' South. Longitude 163° 15' 15" East.

From the first of these positions Lady Elliott Island bears W. by N. 1 N., 264 miles.

B. P. CREAGH, Comdr., E.I.M., Port Officer of Oaloutta.

Published for general information.
T. H. Clowes,

Under-Secretary, Marine Department.

CALGUTTA, the 23rd February 1898.

. GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 48.

[First Publication.]

AUSTRALIA-BRISDANE RIVER.

Rescinding Notice to Mariners No. 1 of 1898.

The Portmaster, Brisbane, has given notice (No. 3 of 1898) that Notice to Mariners, No. 1 of 1898, dealing with the Tide Signals in connection with increased depth of the Brisbane river, is rescinded.

B. P. CERAGH, Comdr., 2.1.M., Port Officer of Coloubia.

Published for general information.

Caroutra, the 28rd February 1808,

T. H. CLOWES, Under Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 40.

[First Publication.]

AUSTRALIA-CLEVELAND BAY.

A small light near the Quarantine Station jetty.

THE Portmaster, Brisbane, has given notice (No. 4 of 1898) that a small white light is now exhibited from a platform situated near the Quarantine Station Jetty, Cleveland bay, to enable vessels to pick up the deepwater anchorage with greater facility.

The light is visible between the bearings of N. 78° E. and N. 34° E., being screened

to mark the No. 2 Black Buoy and the Cage Buoy.

B. P. OREAUH, Comdr., B.LM., Port Officer of Calcullar

Published for general information.

OALCUMBA, the 23rd February 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 50.

[First Publication.]

AUSTRALIA-PRINCE OF WALES CHANNEL.

Beucon en Ipili Reef blown down.

THE Portmaster, Brisbane, has given notice (No. 5 of 1898) that the Bessen on Ipili Reef, Prince of Wales Channel, has been blown down. The beason will be restored as soon as possible, due notice of which will be given.

Charte affected No. 2354 and 602

Charts affected, Nos. 2354 and 691 Australia Directory, volume 2, page 481.

B. P. CREAGH, Comdr., R.L.H. Port Officer of Calcutta.

Published for general information,

CALCUTTA, the 28th February 1898.

T H. CLOWES, Under-Becretary, Naring Department.

NOTICE TO MARINERS-No. 51. [First Publication.]

BAY OF BENGAL SANDHEADS HOOGRLY RIVER.

Pilot's Ridge light-ship placed in position.

Tax Deputy Conservator of the Port, Calcutta, has given notice that the Pilot's Ridge light-ship, which is now placed in position from the 15th March to the 31st October, inclusive, will, from the 1st November next, remain in position the whole year. There will be no blue light burnt between the 1st November and the 14th March.

B. P. CREAGH, Comdr., a i.m., Port Officer of Colculta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 23rd February 1808.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 52.

[First Publication.]

BAY OF BENGAL-HOOGHLY RIVER-GASPER CHANNEL

A flashing light instead of a fixed white light.

Tax Deputy Conservator of the Port, Calcutte, has given notice that the fixed white light now exhibited from the Lower Gasper lightship will be discontinued from the 31st October

In place thereof this lightship will display, on and after the 1st Nevember next, a finshing light in the following periods:—A flash of 10 seconds, an eclipse of 10 seconds; a flash of 10 seconds and a dark interval of 30 seconds.

The blue lights will be shown as notified.

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calculta.

Published for general information.

CALCUTTA, the 23rd Fobruary 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 53.

[First Publication.]

CHINA, EAST COAST-HAT TAN STRAIT.

L ading beacons on Pass and Slut islands.

Tux British Admiralty has given notice (No. 45 of 1898) that the undermentioned leading beacons have been erected in Hai tan strait, to assist in the navigation of the Narrows :-

1. Two beacons on the north-eastern slope of Pass island, bearing when in line 8. 20 1° E.

Each beacon is surmounted by a diamond-shaped top-mark, the northern with a white field and central part black; the southern with a black field and central part white.

Approximate position, Pass island, lat. 25° 274' N., long. 119° 394' E.

2. Two beacons on the south-eastern alope of Slut island, bearing when in line N. 81° W.

Each beacon is susmounted by a triangular top-mark, painted white with a vertical, black stripe in the middle; the triangle on the northern beacon is placed bese upwards, on the southern hase downwards.

Approximate position, Slut island, lat. 25° 40\$' N., long. 119° 37' E.

Norn .- Soundings, obtained in a recent survey, show that vessels proceeding northward Norm—Soundings, obtained in a recent survey, show that vessels proceeding northward half keep the Pass island beacons in line, astern, bearing S. 201° E., from a position with kein hill in line with Tyne Yung shan peak, bearing W. § S., until the southern end of the siddle Rocky island is in line with a fort on the west shore, bearing W. by N. § N.; then her course to the northward to pass about 3 cables eastward of Black rocks. The least later passed over by following these directions will be a depth of 15 feet at lowest springs, based about 3 miles from Pass island. Proceeding northward, the bencons on Slut island should be brought in line, bearing N. 81° W., when Inner rock bears East, and should be kept in line, leading well clear of all known dangers, until Mitre rock bears West.

(Variation 2º Westerby in 1898.)

B. P. CREAGH, Comde., R.I.N., Port Officer of Calcutta,

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department,

CALCUTTA, the 23rd February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 54.

[First Publication.]

NEW ZEALAND-South ISLAND.

Westport—Alterations in lights and night tidal signals.

THE British Admiralty has given notice (No. 48 of 1898) that on 1st January 1898, the harbour lights and night tidal signals, hitherto shown at Westport, would be replaced by the undermentioned lights and signals:—

The white harbour light, shown from the flagstaff on the western breakwater, without any additional signal, indicates:—Wait.

A red light under the white harbour light, indicates:—Bar unsafe.

8. A green light over the white harbour light, indicates: - Bar safe for vessels of 9 feet draught.

A green light under the white harbour light, indicates:-Bar safe for vessels of 114 feet draught.

A white light under the white harbour light, indicates :- Bar safe for vessels of 14 feet draught.

Two red lights are shown, as fairway lights, from the beacons on the west side of the harbour within the breakwaters; the front beacon is painted white, the rear beacon, white with a red band.

These lights, when in line, bear S. by E. & E., and they should be kept in line over the bar and between the breakwaters, until the two red lights, shown from beacons on the western breakwater, are in line, bearing N. W. by N., when these last lights should be kept in line astern, up the river to the wharves.

7. The white harbour light is always shown; the red fairway lights are not shown when the bar is unsafe.

B. P. CREAGE, Comdr., R.I.N., Port Officer of Calculla.

Published for general information.

T. H. CLOWES, Under-Secretary, Murine Department.

CALCUITA, the 23rd February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 56.

[First Publication.]

BAY OF BENGAL-MADRAS COAST.

CAUTION .- Position of a submerged wreck.

A TELEGRAPHIC communication has been received from the Presidency Port Office. Madras, stating that the Commander of the Nawab reports having passed a submerged with most visible in Lat. 19° 26′, North Long. 86° 11′ East. Mariners are warned about ingly. ingly.

B. P. CERAGE, Comdr., R.I.M., Port Officer of Calmita

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

. CALCUTTA, the 26th February 1898.

NOTICE TO MARINERS-No. 40.

[Second Publication.]

EASTERN ARCHIPELAGO-CELEBES, SOUTH COAST.

Sunken rock south-westward of Cape Bulu Bulu.

The British Admiralty has given notice (No. 22 of 1898) that the Master of the Netherlands Indies steam-vessel Japana reports the existence of an isolated rock, with a depth of 16 feet on it, situated about one mile off shore in a position with Malasoro point in line with Jenepoute head bearing about W. by N. † N.; and point Petang about N.E. † E.

Approximate position, lat. 5° 42' 50" S., long. 119° 44' 25" E.

(Variation 2º Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calcuita.

Published for general information.

CALGUTTA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 41. (Second Publication.) EASTERN AROHIPELAGO-LORROR.

Light at Ampenan.

The British Admiralty has given notice (No. 23 of 1898) that, on 5th January 1898, a sixth order, fixed white light, elevated 41 feet above the sea, and visible 11 miles in clear weather, was shown from a white, frame-work, iron support, 42 feet in height, with the keeper's dwelling (white, red roof) adjoining, situated in position bearing N.E. by N., distant 68 yards, from Ampenan flagetaff, west coast of Lombok.

Approximate position, lat. 8° 34' 15" S., long. 116° 3' 55" E.

(Variation 2º Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calcutte.

Published for general information.

OALGUSTA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 42.

(Second Publication.)

PACIFIC OCEAN-PHILIPPINE ISLANDS-MINDANAO.

Higan bay - Amended particulars of coral patch, eastward of point Bombon.

THE British Admiralty has given notice (No. 25 of 1898) that an examination has recently been made of the danger marked Rocky bank," &c., about 12 miles eastward of point Bombon, west side of Higan bay, with the undermentioned result:—

This patch, consisting of coral and white sand, is about 8 cables in length, northwest and south-east, within the 5-fathom line, and 2 cables broad, with a least depth of 16 feet on it, and soundings of upwards of 50 fathoms about a mile off around.

It is situated about 21 miles, N.E. by N., from the position in which it has hitherto been shown on the charts, or approximately in lat. 8° 40° N., long. 123° 51° E.

(Variation 1º Easterly in 1898.)

H. LINDQUIST, for Port Officer of Calentia.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the 15th February 1898.

NOTICE TO MARINERS-No. 43.

(Second Publication.)

BAY OF BENGAL-BURMA COAST.

Ligh-vessel " Krishna" resumed her station.

In continuation of Notice to Mariners No. 242, dated 16th December 1895, issued by this Office, a further telegraphic communication has been received from the Port Officer, Rangoon, stating that the Krishna shoal light-vessel has resumed her station exhibiting original light. The temporary light-vessel has been withdrawn.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcuita.

Published for general information.

T. H. CLOWES,

CALCUITA, the 21st February 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, -MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 44.

[Second Publication.]

BAY OF BENGAL-BURNA COAST.

CAUTION - Position of wreck of steamer " Meduza."

A TELEGRAPHIC communication has been received from the Port Officer, Rangoon, stating that the Commander of the Royal Indian Marine steamer Minto reports that the wreck of the steamer Medusa lies sunk from 6 to 8 fathoms water bearing south 27° east, true, from Table island light-house, distance 9 cables approximate, and 5 cables approximate from the above; fore and after ends submerged, bridge above water, foremast standing. Mariners are warned accordingly.

B. P. ORRAGH, Comdr., 2.1.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 21st February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINEES-No. 46.

[Second Publication.]

INDIAN OUEAN-MALACCA STRAITS.

A shoal not marked on Admirally chart.

The Master of the ship Tinto Hill reports the existence of a shoal not marked of Admiralty chart for Malacca Strait, number of chart being 1355, sheet No. 2, having smal corrections up to 1st January 1896 and large corrections to December 1885. He also discovered a narrow strip of black sand about 50 fathoms long N.N.W. and S.S.E. (with sea birds picking on it) about a mile off; tacked ship to N. by E. \(\frac{3}{4}\) E. when the following bearings were taken:—"Parcelar Hill" E. \(\frac{1}{4}\) N., One fathom bank light-house N. \(\frac{1}{4}\) E. and the ridge of sand forming shoal W. by S. \(\frac{1}{3}\) S.; ship's head by standard compass N. by E. \(\frac{3}{4}\) E.; error 26' easterly; tide flowing and setting S.E. by S. and running 2\(\frac{1}{4}\) knots, more or less. Immediately ship was heading off took cast of the lead and had no bottom at 25 fathoms. Weather clear and fine. Wind variable.

B. P. ORBAGH, Comdr., R.L.M. Port Ufficer of Culentia.

Published for general information.

. CALCUTTA, the 21st February 1898.

T. H. CLOWES, Under-Beardary, Marine Department.

GOVERNMENT OF BENGAL -MARINE DEPARTMENT

NOTICE TO MAKINERS-No. 34.

[Third Publication.]

BAY OF BENGAL -- ORISSA COAST.

New Elfin Fairway buoy shifted; and Dinga flat extended.

THE Port Officer, Chandbally, has given notice that the New Elfin Fairway buoy has been shifted 3,000 feet W. by N. of its former position into 10 feet reduced; flagstaff N. 70 W. from fairway buoy. There is now k' 9" on the New Elfin Bar.

The centre Elfin block board has been thirty of the Secretary Elfin block board has been thirty for the Secretary Elfin block board has been thirty for the Secretary Elfin block board has been thirty for the Secretary Elfin block board has been thirty for the Secretary Secretary for the Secretary Secretary Secretary for the Secretary Secretary Secretary for the Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary Secretary S

The centre Elfin black bucy has been shifted 50 feet east of its former position into 5 feet reduced. Masters of vossels making the entrance of Balacore river vid New Elfin feet reduced come in on a course of N. 40° 80° W. magnetic from Fairway buoy transit

marks. The new Elfin transit marks have been shifted from their former position on the bearing in line N. 40° 30′ W. The backing mark has been surmounted by a white globe as this shows up much better with the jungle forming a dark back ground.

The old channel is shoaling up, and there is now on the outer bar 6 inches, and the inner

bar is dry at low water.

The Dings flat has extended considerably and encroaches into the channel. Masters should keep well into the right bank as the flat is very steep, and should open Whoorguddi Reach slightly before crossing. Small bamboo marks have been erected for this purpose.

H. LINDQUIST, for Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 9th February 1828.

T. H. CLOWRE, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 35.

[Third Publication.] AUSTRALIA-Port PHILLIP.

Lights exhibited in the river Yarra.

THE British Admiralty has given notice (No. 10 of 1898) that the undermentioned lights are exhibited in the river Yarra, in addition to those shown from the 4 gas buoys moored on the port side of the channel between the entrance and Williamstown steam ferry :-

A white light is shown from a beacon erected on the north (starboard) side of the entrance of the river; and a red light from a beacon on the south (port) side of the entrance. These replace the gas buoys previously moored in those

Approximate position, white light, lat. 37° 51′ 15° S., long. 144° 54′ 40° E.

- A white light, on the river bank nearly opposite Williamstown steam ferry, in a position with Sandridge (port Melbourne) Railway pier lighthouse bearing S. 85° E., distant 15½ cables; and State school, North Williamstown, 8. 9° W.
- Eight white lights on the same bank of the river as light (2), situated respectively
 on the following bearings and distances from that light:—

 - a. N. by W. & W., distant 2/3 cables; close to the bank.
 b. N. by W. & W., distant 4 cables; close to the bank.
 c. N. & W., distant 5/3 cables; close to the bank.
 d. N. & W., distant 7 cables; close to the bank.
 s. N. & E., distant 8/3 cables; at the extremity of the southern timber into.
 - jetty.

 f. N. # E., distant 9 cables; at the extremity of the northern timber
 - jetty.

 9. N. by E. ‡ E., distant 11 to cables; at the west end of the sheet piling.

 5. N. E. ‡ N., distant 18 to cables; on the bank, nearly opposite the Harbour Trust workshops.
- 4. A red light on the north side of the entrance to Stony crock, in a position with the centre of the Cement works, on the south side of Stony crock, hearing W. by N. 1 N., distant 2 cables; and centre of Smelting works N. by E. 2 E.

 5. A red light on the east side of the entrance to Saltwater river, in position with
- centre of Smelting works bearing W. 1 N., distant 12 cables; and extremity of northern timber jetty S.S.W. 1 W.

6. Two white lights on the same bank as light (5), on the following bearings and distance from that light :-

a. N. E. by E. ‡ E., distant 3 cables; close to the bank.
b. N. E. by E. ‡ E., distant 6 cables; close to the bank.
c. A red light, in a position bearing E. by N. ‡ N., distant 9 cables; from light (5); and at the extremity of the point eastward of the Harbour Trust workshops.

(Variation 8º Easterly in 1898.)

H. Lindquier, for Port Officer of Calcutta.

Published for general information.

T. H. CLOWES. Calcurra, the 11th February 1898. Under-Secretary, Murine Department.

NOTICE TO MARINERS-No. 86.

(Third Publication.)

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Buoys westward of Balugyun and Goodwin sands, Moulmein approach. THE British Admiralty has given notice (No. 12 of 1898) that the undermentioned buoys have been placed westward of Balugyun and Goodwin sands:—

1. A can buoy, painted black and numbered 1, moored on the north side of the entrance to the buoyed channel through Balugyun sands, in a position with conspicuous tree on south coast of Balugyun bearing N.N.E. § E., distant 2-70 miles; and Wai gyee Chaung beacon E. by S. § S.

Approximate position on Plan No. 1845, lat. 16° 12′ 5° N., long. 97° 29′ 5″ E.

A conical buoy, painted red, numbered 1 and surmounted by a pole and basket moored on the south side of the entrance to the buoyed channel through Balugyun sands, in a position with Balugyun conspicuous tree bearing N. by E. ‡ E., distant 2 for miles; and Wai gyee Chaung beacon E. by S. ‡ S.
 A conical buoy, painted red and named Balugyun cand buoy, moored in a position with Balugyun conspicuous tree bearing N. ‡ E., distant 4 miles; and Wai gyee Chaung beacon E. ‡ S.
 A conical buoy, painted red and named Goodwin and buoy, moored in a position with Balugyun conspicuous tree bearing N. ‡ E., distant 4 miles; and

A conical buoy, painted red and named Goodwin sand buoy, moored in a position with Balugyun conspicuous tree bearing N. & E., distant 6 miles; and Wai gyee Chaung beacon E. by N. § N.

Note. The buoy moored on the western side of the Patch, about W. by N. I N. from

Amherst point, is now a conical buoy, painted red and surmounted by pole and basket.

GAUTION.—The channel north of Balugyun sand is marked with red buoys on the south side and black buoys on the north side. As stated on the chart, this is the only available channel, but it has not been surveyed.

Pilote are necessary and can be obtained at Amherst.

(Variation 3º Easterly in 1898.)

H. LINDQUET, for Port Officer of Calculta.

Published for general information.

T. H. CLOWES,

Calcutta, the 11th February 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 87.

[Third Publication.] JAPAN-NIPON.

Atsumi peninsula—Oyama light discontinued.

THE British Admiralty has given notice (No. 14 of 1898) that Oyama light (fixed res), which was discontinued (temporarily) in 1895, has not since appeared in the Japanese Light List, and it has consequently been removed from the Admiralty publications.

Approximate position, lat. 34° 35′ 30″ N., long. 187° 9′ 0′ E.

H. LINDQUIST, for Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 11th February 1868.

T. H. CLOWES. Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 18.

[Third Publication.] BAY OF BENGAL-CHITTAGONG COAST.

Chitlagony river - Depth of water found in the channels.

THE Port Officer, Chittagong, has given notice that the following depth of water was found in the river channels by soundings taken on the 7th February and reduced to zero:

				L.c.	TIII+
Track No. I—Outer bar— Disc in the centre of Diamond and Disc on Tripod cask and ball	the T	ripod cask	and buoy	11 10	3
Truck No. II-Inner bar-	-			10	в
Disc on Tripnd cask and ball	***	***	943	10	0

					-	-		
Track No. III-			-			Ft.	ln.	
Tripod on cross and be	ш	***	141	f d	444	19	0	
Triangle on tripod, on Track No. V — Guptakhally		***	* 101		114	20	0	
Old marks	***	414	414			16	0	
Tripod on diamond	196	***	1 m g		***	16 15	0	
Pn	blished for m	omanal in		for		Linda Officer	vist, of Calcut	ta,

Published for general information.

T. H. Clowm, Under-Secretary, Marine Department.

CALCUTTA, the 11th February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 39.

[Third Publication.]

BAY OF BENGAL-ORISSA COAST.

Outer western Ridge buoy replaced in position.

With reference to Notice to Mariners No. 20, dated 25th ultimo, issued by this office, the Port Officer, False Point, has given further notice that the outer western Ridge buoy has been replaced in position; and the 5th class flat-topped buoy withdrawn.

H. LANDQUIET,
for Port Officer of Calcutta.

Published for general information.

T. H. Clowrs, Under-Secretary, Marine Department.

OLLOUTER, the 14th February 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MARCH 9, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 56.

[First Publication.]

BAY OF BENGAL-BURMA COAST.

The " Medusa" first struck on a reck.

With reference to Notice to Mariners No. 44, dated the 21st February, issued by this office, the Port Officer, Rangoon, has given further notice that the Master of the steamer Medusa reports that that vessel first struck a rook two miles north-west of Table island before becoming a wreck in the position previously notified.

B. P. CRESCH, Comdr., R.I.M. Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUITA, the let March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 57.

[First Publication.]

AUSTRALIA, INNER ROUTE-Howick GROUP.

Sunken rock westward of Houghton island.

Taz British Admiralty has given notice (No. 53 of 1898) of the existence of a rock, hith a depth of 18 feet on it at low water springs, situated in a position with Howick island mumit (206) bearing about N. 65° E., distant 2; miles; and western extreme of Howick land N. 7° W.

Approximate position, lat. 14° 31′ 20" S., long. 144° 57′ 10" E.

(Variation 6º Easterly in 1898.)

B. P. CREAGH, Comdr., R.L.M., Post Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the Srd March 1898.

NOTICE TO MARINERS-No. 68.

[First Publication.]

CELEBES, EAST COAST-GULF OF TOMENI.

Coral patch costward of Silabian point.

The British Admiralty has given notice (No. 54 of 1898) of the existence of a very small patch of sand and coral, with a depth of 3 fest on it, and no bottom at 70 fathoms close to all round, situated in a position about 3 miles eastward of Silabian point, or approximately in lat. 0° 21′ 0″ N., long. 120° 25′ 45″ E.

B P. CREAGH, Comdr., B.LM., Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 3rd March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 60.

[First Publication.]

CEYLON, SOUTH-WEST COAST-POINT DE GALLE APPROACE.

Non-existence of Luna Horowa rock.

THE British Admiralty has given notice (No. 55 of 1898) that information has been received from the Master Attendant at Point de Galle, dated 22nd December 1897, that he recently examined the locality in which Luna Horowa rock has hitherto been shown on the Admiralty Charts, viz., hearing S.E. § S., distant 1; miles, from Unawatti point, and found not less than 10 fathoms in that position.

The fishermen state that the name Horowa Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the name Horowania and the state that the state that the name Horowania and the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state that the state t

The fishermen state that the name Horowa rock is applied to a 3-fathom patch, which lies about a cable south-westward of Bellows rock, and on which the sea breaks heavily in

the South-west monsoon, and that no other shoal is known in the vicinity.

Luna Horowa rock (P. D.) has consequently been expunged from the Admiralty Chara, and the danger line has been extended one cable south-westward of Bellows rock.

Approximate position, Bellows rock, lat. 5° 59′ 45″ N., long. 80° 14′ 30″ E.

(Variation I Easterly in 1898.)

B. P. CREAGH, Comdr., BALM., Port Officer of Ocloutte.

Published for general information.

CALCUTTA, the Sed March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 60.

[First Publication.]

NEW ZEALAND, SOUTH ISLAND- AWARNA OR BLUFF HARBOUR.

Buoys marking area of blasting operations.

THE British Admiralty has given notice (No. 59 of 1898) that blasting operations are being carried on to remove Mid-channel rock, which is presumed to be the 19 feet rock situated in the entrance to Bluff harbour, about N. by W. W., distant 51 cables, from the eastern extreme of Stirling rock.

the eastern extreme of Stirling point.

The area of the works is defined by four red buoys, and all vessels should pass northwird

A note to that effect has been placed on the plan of the entrance on Chart No. 2540. of these buoys.

Approximate position, lat. 46° 36' 35" S., long. 168° 22' 55" E.

(Variation 16° Easterly in 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calculis.

Published for general information.

Under-Secretary, Marine Department. T. H. CLOWIL

CALCUTTA, the 3rd March 1898.

NOTICE TO MARINERS-No. 61.

[First Publication.]

CHINA, EAST COAST-HALTAN STRAIT.

Rock in north entrance.

THE British Admiralty has given notice (No. 60 of 1898) that information has been received through the Board of Trade that, on 3rd October 1897, the stuam-vessel Namea struck on a rock, which is said to lie about half a mile westward of Brown rock, north entrance of Hai tan strait.

The symbol for a rock with less than 6 feet water on it, with the words "Namoa rock (post approx")" written against it, has been placed on the Admiralty Chart in approximately lat. 25° 47′ 10″ N., long. 119° 38′ 55″ E.

B. P. CRBAGH, Comdr., R.I.M., Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Murins Department.

Carcutta, the 3rd March 1.98

GOVERNMENT OF BENGAL-MABINE DEPARTMENT.

NOTICE TO MARINERS-No. 62.

[First Publication.]

EASTERN ARCHIPELAGO-BULBLENG (BELILING) ROAD.

Submarine telegraph cable moved eastward and light discontinued.

The British Admiralty has given notice (No. 70 of 1898)—The Netherlands Government has given Notice, dated 26th January 1898, that the landing-place of the submarine telegraph cable in Buleleng (Beliling) road has been moved from the western to the eastern telegraph-cable house; and the prohibited onchorage is now further eastward than the white cone on the western angle of the western cable house in line with the white ball on the roof of that house Consequently the red light, previously shown from the western cable house over the prohibited anchorage, has been discontinued; and the white cone, on the eastern angle of that house, has been withdrawn.

Approximate position, lat. 8° 5′ 45″ S., long. 115° 5′ 0° E.

B. P. Cheagh, Comdr., s.i.m., Part Officer of Onicuita.

Published for general information.

CALCUTTA, the 3rd March 1898.

T. H. CLOWEL Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DPARTMENT.

NOTICE TO MARINERS-No. 46.

[Second Publication.]

AUSTRALIA-BRISDANE RIVES.

Increased depth of water in the dredged channels of the Brisbane river, and corresponding alteration of Tide signals from the Pile light-house.

THE Port Master, Brisbane, has given notice (No. 1 of 1898) that, on and after the 16th instant, the available depth in the dredged outlings of the Brisbane River will be 16 feet at jow water.

APPENDIX TO THE CALCUTTA GAZETTE, MARCH 9, 1898.

Tide signals will be made from the Pile Light-house in accordance with the following amended code:—

Day Signals.		E	Depth in Cutting (Fost),		Night tilgnals.
Flag East	140		16		White East.
Flog West	105		161	***	White West.
Ball East	114	111	17		Red East.
Ball West			174		Red West.
Cone Bast		•••	18	110	Green East.
Cone West	***		184		Green West.
Inverted cone E		149	19	9.00	
Inverted cone W		4		***	White East, red West.
		***	194	A 10 mm	White West, red East.
Ball East, cone West		20	***	Red East, green West.	
Ball West, cone East			201	844	Red West, green East.
Ball East, inverted cone West			21	***	Green East, white West.
Ball West, inverted cone East			21	249	Green West, white East,
Cone East, inverted cone West			22		White East, white West.
Cone West, inverted cone East			224		Red East, red West.
Cone East, cone	West .		23	111	Green East, green West.
Inverted cone East, inverted cone					The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
West		104	231		Two White vertical West.
Ball East, ball V	Vest		24		Red over white West.
Flag East, flag	West		244	***	Green over white West.
	7			***	OTHER ALEX MITTER ALGELT

It will be noted that no alteration is to be made in the arrangement of the symbols, the changes made being in the depth corresponding to each signal.

B. P. CREAGH, Comde., B.I.M., Port Officer of Calcutta.

Published for general information.

T: H. Clowes, Under-Secretary, Marine Department.

Caloutta, the 23rd February 1898.

GOVERNMENT OF BUNGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 47.

[Second Publication.]

AUSTRALIA

New Caledonian submarine cable.

Tax Portmaster, Brisbane, has given notice (No. 2 of 1898) that, in connection with the repairs to this Cable, there are now two buoys, surmounted with Flag and Staff, laid in the following positions, viz.:—

Rivet-

Latitude 24° 17′ 15° South, Longitude 153° 12′ East.

Second-

Latitude 24° 17' South. Longitude 153° 15' 15" East.

From the first of these positions Lady Elliott Island bears W. by N. & N., 264 miles.

B. P. CREAGH, Comdr., B.1.M., Port Officer of Calcutte.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

Calcutta, the 25rd February 1898.

APPENDIX TO THE CALOUTTA GAZETTE, MARCH 9, 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 48. [Escond Publication.] AUSTRALIA-BRISBANE BIVER.

Rescinding Notice to Mariners No. 1 of 1898.

Taz Portmaster, Brisbane, has given notice (No. 3 of 1898) that Notice to Mariners, No. 1 of 1898, dealing with the Tide Signals in connection with increased depth of the

B. P. CREAGH, Comdr., R.I.M., Port Officer of Caloutte.

Published for general information.

CALCUTTA, the 25rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 49. [Second Publication.] AUSTRALIA-CLEVELAND BAY.

A small light near the Quarantine Station jetty.

The Portmaster, Brisbane, has given notice (No. 4 of 1898) that a small white light is now exhibited from a platform situated near the Quarantine Station Jetty, Cleveland bay, to enable vessels to pick up the deepwater anchorage with greater facility.

The light is visible between the bearings of N. 78° E. and N. 34° E., being screened

to mark the No. 2 Black Buoy and the Cage Buoy.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 23rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 50, [Second Publication.]

AUSTRALIA-PRINCE OF WALES CHANNEL.

Beacon on Ipili Reef blown down.

The Portmaster, Brisbane, has given notice (No. 5 of 1898) that the Beacon on Ipili Reef, Prince of Wales Channel, has been blown down. The beacon will be restored as soon as possible, due notice of which will be given. Charts affected, Nos. 2354 and 691

Australia Directory, volume 2, page 431.

B. P. GREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 28th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 5L.

[Second Publication.]

BAY OF BENGAL-SANDHEADS-HOOGHCY RIVER.

Pilot's Ridge light-ship placed in position.

The Deputy Conservator of the Port, Calcutta, has given notice that the Pilot's Ridge light-ship, which is now placed in position from the 15th March to the 31st October, inclusive, will, from the let November next, remain in position the whole year. There will be no blue light burnt between the 1st November and the 14th March.

B. P. CREAGH, Comdr., RI.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Scoretary, Marine Dipartment.

CALCUTTA, the 23rd February 1808.

NOTICE TO MARINERS-No. 62.

[Second Publication.]

BAY OF BENGAL-HOOGHLY RIVER-GATPER CHANNEL.

A flashing light instead of a fixed white light.

The Deputy Conservator of the Port, Calcutta, has given notice that the fixed white light now exhibited from the Lower Gasper lightship will be discontinued from the 81st October

In place thereof this lightship will display, on and after the 1st November next, a flashing light in the following periods:—A flash of 10 seconds, an eclipse of 10 seconds; a flash of 10 seconds and a dark interval of 30 seconds.

The blue lights will be shown as notified.

B. P. OREAGH, Comdr., R.I.N., Port Officer of Calcutta.

Published for general information.

OMICUITA, the 25rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 53.

[Second Publication.]

CHINA, EAST COAST-HAI TAN STRAIT.

Leading beacons on Pass and Slut islands.

THE British Admiralty has given notice (No. 45 of 1898) that the undermentioned leading beacons have been erected in Hui tan strait, to assist in the navigation of the Narrows :-

1. Two beacons on the north-eastern alope of Pass island, bearing when in line S. 201° E.

Each beacon is surmounted by a diamond-shaped top-mark, the northern with a white field and central part black; the southern with a black field and central part white.

Approximate position, Pass island, lat. 25° 27½ N., long. 119° 39½ E.

. 2. Two beacons on the south-eastern slope of Slut island, bearing when in line N. 81° W.

Each beacon is surmounted by a triangular top-mark, painted white with a vertical, black stripe in the middle; the triangle on the northern beacon is placed base upwards, on the southern base downwards.

Approximate position, Slut island, lat. 25° 40½' N., long. 119° 37' E.

Nors.—Soundings, obtained in a recent survey, show that vessels proceeding northward should keep the Pass island beacons in line, astern, bearing 8. 20½ E., from a position with Quoin hill in line with Tyne Yung shan peak, bearing W. § S., until the southern end of the middle Rocky island is in line with a fort on the west shore, bearing W. by N. ½ N.; then after course to the northward to pass about 3 cables eastward of Black rocks. The least water passed over by following these directions will be a depth of 15 feet at lowest springs, situated about 3½ miles from Pass island.

Proceeding porthward, the beacons on Slut, island, should, be beautiful.

Proceeding northward, the beacons on Slut island should be brought in line, bearing N. 84° W., when Inner rock bears East, and should be kept in line, leading well clear of all known dangers, until Mitre rock bears West.

(Variation 1º Westerly in 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 23rd February 1898.

NOTICE TO MARINERS-No. 54.

[Second Publication.] NEW ZEALAND-SOUTH ISLAND.

Westport-Alterations in lights and night tidal signals.

THE British Admiralty has given notice (No. 48 of 1898) that on 1st January 1898, the harbour lights and night tidal signals, hitherto shown at Westport, would be replaced by the undermentioned lights and signals :-

1. The schite harbour light, shown from the flagstaff on the western breakwater, without any additional signal, indicates: - Wait.

A red light under the white harbour light, indicates :- Bar unsafe.

3. A green light over the white harbour light, indicates: - Bar safe for vessels of 9 feet draught.

4. A green light under the white harbour light, indicates:-Bar sale for vessels of 11 feet draught.

A white light under the white harbour light, indicates: - Bar safe for vessels of 14 feet draught.

Two red lights are shown, as fairway lights, from the beacons on the west side of the harbour within the breakwaters; the front beacon is painted white, the 6. rear beacon, white with a red band.

These lights, when in line, bear S. by E. J. E., and they should be kept in line over the bar and between the breakwaters, until the two red lights, shown from beacons on the western breakwater, are in line, bearing N. W. by N., when these last lights should be kept in line astern, up the river to the wharves.

7. The white harbour light is always shown; the red fairway lights are not shown when the bar is unsafe.

B. P. CREAGH, Comde., R.1.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Murine Depurtment.

CALCUTTA, the 23rd February 1898.

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GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 55.

[Second Publication.]

BAY OF BENGAL-MADRAS COAST.

CAUTION .- Position of a submerged wreck.

A TELEGRAPHIC communication has been received from the Presidency Port Officers Madras, stating that the Commander of the Nawab reports having passed a submerged wreck with must visible in Lat. 19° 26', North Long. 86° 11' East. Mariners are warned accord-

B. P. CREAGH, Condr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Scoretary, Marine Department.

CALCUTTA, the 26th February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 40.

[Third Publication.]

EASTERN ARCHIPELAGO-CELEBES, SOUTH COAST.

Sunken rock south-westward of Cape Bulu Bulu.

THE British Admiralty has given notice (No. 22 of 1898) that the Master of the Netherlands Indies steam-vessel Japara reports the existence of an isolated rock, with a depth of 16 feet on it, situated about one mile off shore in a position with Malasoro point in line with Jeneporto head bearing about W. by N. & N.; and point Petang about N.E. & E.

Approximate position, lat. 5° 42′ 50″ S., long. 119° 44′ 25″ E.

(Variation 2º Easterly in 1898.)

H. LINDQUIST, for Part Officer of Calcutta.

CALCUTYA, the 15th February 1898.

Published for general information.
T. H. Chowsey Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 41.

[Third Publication.] [
EASTERN ARCHIPELAGO—LONSOR.

Light at Amponan.

The British Admiralty has given notice (No. 23 of 1898) that, on 5th January 1898, a sixth order, fixed white light, elevated 41 feet above the sea, and visible 11 miles in clear weather, was shown from a white, frame-work, iron support, 42 feet in height, with the keeper's dwelling (white, red roof) adjoining, situated in a position bearing N.E. by N., distant 68 yards, from Ampenan flagstaff, west coast of Lombok.

Approximate position, lat. 8° 34' 15" S., long. 116° 3' 55" E.

(Variation 2º Easterly in 1898.)

H. IANDAUIST, for Port Officer of Calcula.

Published for general information.

CALCULTA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 42.

[Third Publication.]

PACIFIC OCEAN-PHILIPPINE ISLANDS-MINDANAO.

Iligan bay - Amended particulars of coral patch, eastward of point Bombon.

The British Admiralty has given notice (No. 25 of 1898) that an examination has recently been made of the danger marked "Rocky bank," &c., about 12 miles eastward of point Bombon, west side of Higan bay, with the undermentioned result:—

This patch, consisting of coral and white sand, is about 3 cables in length, northwest and south-east, within the 5-fathom line, and 2 cables broad, with a least depth of 16 feet on it, and soundings of upwards of 50 fathoms about a mile off around.

It is situated about 2½ miles, N.E. by N., from the position in which it has hitherto been shown on the charts, or approximately in lat. 8° 40' N., long. 123° 51' E.

(Variation 1º Easterly in 1898.)

H. Lindquist,
for Port Officer of Calcula.

Published for general information.

CALGUTTA, the 15th February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 43.

[Third Publication.]

BAY OF BENGAL-BURKA COAST.

Ligh-ressel " Krishna" resumed her station.

In continuation of Notice to Mariners No. 242, dated 16th December 1895, issued by this Office, a further telegraphic communication has been received from the Port Officer, Raugoon, stating that the Krishna shoul light-vessel has resumed her station exhibiting original light. The temporary light-vessel has been withdrawn.

B. P. Carach, Comds., a.t.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

CALCUTTA, the Slat February 1898.

NOTICE TO MARINERS-No. 44.

[Third Publication.]

BAY OF BENGAL-BURMA COAST.

OAUTION - Position of wreck of steamer " Modusa."

A TELEGRAPHIC communication has been received from the Port Officer, Rangoon, stating that the Commander of the Royal Indian Marine steamer Minto reports that the week of the steamer Medusa lies runk from 6 to 8 fathoms water bearing south 27° east, true, from Table island light-house, distance 9 cables approximate, and 5 cables approximate from the shore; fore and after ends submerged, bridge above water, foremast standing. Mariners are warned accordingly.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 21st February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 46. [Third Publication.]

INDIAN OUEAN-MALACCA STRAITS.

A shoal not marked on Admiralty chart.

The Master of the ship Tinto. Hill reports the existence of a shoal not marked on Admiralty chart for Malacca Strait, number of chart being 1355, sheet No. 2, having smell corrections up to 1st January 1896 and large corrections to December 1885. He also discovered a narrow strip of black sand about 50 fathems long N.N.W. and S.S.E. (with sea hirds picking on it) about a mile off; tacked ship to N. by E. # E. when the following bearings were taken:—"Parcelar Hill" E. ½ N., One fathem bank light-house N. ½ E. and the ridge of sand forming shoal W. by S. # S.; ship's head by standard compass N. by E. # E.; error 2° 20° easterly; tide flowing and setting S.E. by S. and running 2½ knots, more or lees. Immediately ship was heading off took cast of the lead and had no bottom at 25 fathems. Weather clear and fine. Wind variable.

B. P. CREAGH, Condr., R.I.M., Port Officer of Calentia

Published for general information.

CALCUTTA, the 21st February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.



APPENDIK TO

The Calcutta Gazette.

WEDNESDAY, MARCH 16, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 68.

[First Publication.]

INDIAN OUEAN-MALACCA SETAITS.

A shoal not marked on Admiralty chart.

The Master of the ship Tinto Hill reports the existence of a shoal not marked on Admiralty chart for Malacca strait; number of chart being 1855, sheet 2, having small corrections up to 1st January 1896, and large corrections to December 1885. The shoal referred to is a narrow strip of black sand about 50 fathoms long, N. N. W. and S. S. E. After tacking ship to N. by E. ‡ E., the following bearings were taken:—

Rdge of sand forming shoal W. by S. 1 S. ...
One—fathom bank light-house, N. 1 E. ...
Parcelar Hill—E. 1 N.

... One mile off.

Ship's head by standard compass, N. by E. 2 E.

Error 2º 26' Easterly.

(This cancels Notice to Mariners No. 45, dated 21st February 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department.

CALCUTTA, the 8th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS—No. 66. [Second Publication.]

BAY OF BENGAL-BURNA COAST.

The " Medusa" first struck on = reck.

With reference to Notice to Mariners No. 44, dated the 21st February, issued by this office, the Port Officer, Rangoon, has given further notice that the Master of the steamer Medica reports that that vessel first struck a rook two miles north-west of Table island before becoming a wreck in the position previously notified.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 1st March 1898.

NOTICE TO MARINERS-No. 57.

[Second Publication,]

AUSTRALIA, INNER BOUTE-Howick Chour.

Sunken rock westward of Houghton island.

THE British Admiralty has given notice (No. 53 of 1898) of the existence of a rock, with a depth of 18 feet on at low water springs, situated in a position with Howick island summit (206) bearing about N. 55° E., distant 24 miles; and western extreme of Howick island N. 7° W.

Approximate position, lat. 14° 31′ 20° S., long. 144° 57′ 10° E.

(Variation 6º Easterly in 1898.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta,

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 3rd March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 58.

[Second Publication.]

OBLEBES, EAST COAST-GULY OF TOMINI.

Coral patch eastward of Silabian point.

THE British Admiralty has given notice (No. 54 of 1898) of the existence of a very small patch of saud and coral, with a depth of 3 feet on it, and no bottom at 70 fathems close to all round, situated in a position about 3 miles eastward of Silabian point, or approximately in lat. 0° 21′ 0″ N., long. 120° 25′ 45″ E.

B. P. Cheach, Comdr., B.I.M., Port Officer of Calcutia.

Published for general information.

CALOUTTA, the 3rd Morch 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 59.

[Second Publication.]

CEYLON, SOUTH-WEST COAST-POINT DE GALLE APPROACH.

Non-emistence of Luna Horowa rock.

THE British Admiralty has given notice (No. 55 of 1898) that information has been received from the Master Attendant at Point de Galle, dated 22nd December 1897, that he recently examined the locality in which Luna Horowa rock has hitherto been shown on the Admiralty Charts, viz., bearing S.E. § S., distant 13 miles, from Unawatti point, and found not less than 10 fathoms in that position.

The fishermen state that the name Horowa rock is applied to a S-fathom patch, which lies than the country with most ward of Holowa rock is applied to a S-fathom patch, which

lies about a cable south-westward of Bellows rock, and on which the sea breaks heavily in the South-west monsoon, and that no other shoal is known in the vicinity.

Luna Horowa rock (P. D.) has consequently been expunged from the Admiralty Charts, and the danger line has been extended one cable south-westward of Bellows rock.

Approximate position, Bellows rock, lat. 5° 59′ 45″ N., long. 80° 14′ 30″ E.

(Variation ? Basterly in 1898.)

B. P. CHRAGH, Comde., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department. CALOUTTA, the Srd March 1898.

NOTICE TO MARINERS-No. 60.

[Second Publication.]

NEW ZEALAND, SOUTH ISLAND- AWARNA OR BLUFF HARBOUR.

Buoye marking area of blasting operations.

The British Admiralty has given notice (No. 59 of 1898) that blasting operations are being carried on to remove Mid-channel rock, which is presumed to be the 19 feet rock, situated in the entrance to Bluff harbour, about N. by W. W., distant 51 cables, from

The area of the works is defined by four red buoys, and all vessels should pass northward of these buoys.

A note to that effect has been placed on the plan of the entrance on Chart No. 2540.

Approximate position, lat. 46° 88' 85° S., long. 168° 22' 55° E.

(Variation 16° Rasterly in 1898.)

B. P. CREACH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 3rd March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 61.

[Second Publication.]

OHINA, EAST COAST-HAI TAN STRAIT.

Rock in north entrance.

THE British Admiralty has given notice (No. 60 of 1898) that information has been received through the Board of Trade that, on 3rd October 1897, the steam-vessel Namos stuck on a rook, which is eaid to lie about half a mile westward of Brown rock, north entrance

The symbol for a rock with less than 6 feet water on it, with the words "Names rock (post approx*) "written against it, has been placed on the Admiralty Chart in approximately lat. 25° 47′ 10″ N., long. 119° 38′ 55″ E.

B. P. Caragh, Comdr., B.L.M., Port Officer of Unioutle.

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department,

CALCUTEA, the 3rd March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 62.

[Second Publication.]

EASTERN AROHIPELAGO-BULELENG (BELILING) ROAD.

Submarine telegraph cable moved eastward and light discontinued.

The British Admiralty has given notice (No. 70 of 1898)—The Netherlands Government has given Notice, dated 26th January 1898, that the landing-place of the submarine idegraph cable in Buleleng (Beliling) road has been moved from the western to the eastern case on the western angle of the western cable house in line with the white ball on the roof over the prohibited anchorage, has been discontinued; and the white cone, on the eastern angle of that house, has been withdrawn.

Approximate resistors but 92 57 45% S. Long 1182 57 05 E.

Approximate position, lat. 8° 5′ 45" S., long. 115° 5′ 0° E.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutt L.

Published for general information.

Calcurra, the 3rd March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS—No. 46.

[Third Publication.]

AUSTRALIA-BRISBANE RIVER.

Incremed depth of water in the dredged channels of the Brishane river, and corresponding alleration of Tide signals from the Pile light-house.

THE Port Master, Brisbane, has given notice (No. 1 of 1898) that, on and after the 16th instant, the available depth in the dredged outtings of the Brisbane River will be 16 feet at low water.

Tide signals will be made from the Pile Light-house in accordance with the following amended code:—

led code:— Day Bignals.		Depth in Outling			Night Bignala.
Day in	Street av		(Feet).		White East.
Flag East	44 b	100	16	111	White West.
Flag West	6.01	4+4	16 1 17		Red East.
Ball East	v = 4	141	17t		Red West.
Ball West		***	18	141	Green East.
Cone East	less w	***	184	***	Green West.
Cone West Inverted cone East Inverted cone West		401	19	107	White East, red West.
	West:		194	+ + +	White West, red East.
	West	911	0.0		Red East, green West. Red West, green East.
Ball East, cone West Ball West, cone East			201	855	Green East, white West.
Dall Book inve	Vest	21	***	Green West, white Kest.	
Ball East, inverted cone West Ball West, inverted cone East Cone East, inverted cone West Cone West, inverted cone East			211	***	White East, white West.
			22	***	Red East, red West.
			22 \draw 23	***	Character Creeks West.
Clama Mach OOT	IN WAST	5.64			
Inverted cone	East, mver	CECT COTTO	231	144	Two White vertical West.
West	707	4-0	0.4		Red over white West.
Ball East, ball			241	***	
Flag East, fla	R those	matica is	to be r	nade in	the arrangement of the symb

It will be noted that no alteration is to be made in the arrangement of the symbols, the changes made being in the depth corresponding to each signal.

B. P. CRBAGH, Comdr., R.LM., Port Officer of Calcula.

Published for general information.

CALCUTTA, the 23rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 47.

[Third Publication.]

AUSTRALIA

New Caledonian submarine cable.

THE Portmester, Bristane, has given notice (No. 2 of 1898) that, in connection with the repairs to this Cable, there are now two buoys, surmounted with Flag and Staff, laid in the following positions wis: the following positions, vis. :-

Latitude 24° 17' 15" South. Longitude 158° 12' East.

Second-

Latitude 24° 17' South. Longitude 153° 15' 15' East.

From the first of these positions Lady Elliott Island bears W. by N. 1 N., 261 miles.

B. P. CREAGE, Comdr., S.I.M.,
Port Officer of Calcults.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department. OALOUTIA, the 23rd February 1898.

NOTICE TO MARINERS-No. 48. [Third Publication.

AUSTRALIA—BRISBANE RIVER.

Rescinding Notice to Mariners No. 1 of 1898.

THE Portmaster, Brisbane, has given notice (No. 3 of 1898) that Notice to Mariners, No. 1 of 1898, dealing with the Tide Signals in connection with increased depth of the Brisbane river, is rescinded.

B. P. ORBAGH, Comdr., S.I.M. Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 23rd February 1898.

T. H. OLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 40.

[Third Publication.]

AUSTRALIA-CLEVELAND BAY.

A small light near the Quarantine Station jetty.

The Portmaster, Brisbane, has given notice (No. 4 of 1898) that a small white light is now exhibited from a platform situated near the Quarantine Station Jetty, Cleveland bay, to enable vessels to pick up the deepwater anchorage with greater facility.

The light is visible between the bearings of N. 73° E. and N. 34° E., being screened

to mark the No. 2 Black Buoy and the Cage Buoy.

B. P. Cheach, Comdr., R.L.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the \$3rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 80.

Third Publication.

AUSTRALIA-PRINCE OF WALES CHANNEL.

Beacon on Ipili Reef blown down.

The Portmaster, Brisbane, has given notice (No. 5 of 1898) that the Beacon on Ipil Red, Prince of Wales Channel, has been blown down. The beacon will be restored as soon w possible, due notice of which will be given. Charts affected, Nos. 2354 and 691.

Australia Directory, volume 2, page 481.

B. P. Canaga, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 28th February 1898.

T. H. CLOWNS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS No. 51.

[Third Publication.]

BAY OF BENGAL-SANDHRADS-HOOGELY RIVER.

Pilot's Ridge light-ship placed in position.

Ten Deputy Conservator of the Port, Calcutta, has given notice that the Pilot's Ridge light-ship, which is now placed in position from the 18th March to the 31st October, inclusive, will, from the 1st November next, remain in position the whole year. There will be no blue light burnt between the 1st November and the 14th March.

B. P. ORRAGH, Comdr., B LM., Port Officer of Calcutta,

Published for general information.

Calculta, the 23rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 52.

[Third Publication.]

BAY OF BENGAL-HOOGHLY RIVER-GASFER CHANNEL.

A flashing light instead of a fixed white light.

The Deputy Conservator of the Port, Calcutta, has given notice that the fixed white light now exhibited from the Lower Gasper lightship will be discontinued from the Slat October next.

In place thereof this lightship will display, on and after the lat November next, a flashing light in the following periods :- A flash of 10 seconds, an eclipse of 10 seconds; a flash of 10 seconds and a dark interval of 30 seconds.

The blue lights will be shown as notified.

B. P. CREAGH, Comde., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUITA, the 23rd February 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 58.

[Third Publication.]

CHINA, EAST COAST-HAT TAN SIBAIT.

Leading beacons on Pase and Slut islands.

THE British Admiralty has given notice (No. 45 of 1898) that the undermentioned leading beacons have been spected in Hai tan strait, to assist in the navigation of the Narrows :--

- 1. Two beacons on the north-eastern slope of Pass island, bearing when in line B. 201° E.
 - Each beacon is surmounted by a diamond-shaped top-mark, the northern with a white field and central part black; the southern with a black field and central part white.

Approximate position, Pass island, lat. 25° 27½ N., long. 119° 394' E.

- 2. Two beacons on the south-eastern slope of Slut island, bearing when in line N. 81° W.
 - Each besoon is surmounted by a triangular top-mark, painted white with a vertical, black stripe in the middle; the triangle on the northern become is placed base upwards, on the southern base downwards.

Approximate position, Slut island, lat. 25° 401' N., long. 119° 37' E.

Note.—Soundings, obtained in a recent survey, show that vessels proceeding northward should keep the Pass island beacons in line, astern, bearing S. 204° E., from a position with Quoin hill in line with Tyne Yung shan peak, bearing W. § S., until the southern end of the middle Rocky island is in line with a fort on the west shore, bearing W. by N. § N.; then alter course to the northward to pass about 3 cables eastward of Black rocks. The least water passed over by following these directions will be a depth of 15 feet at lowest springs, situated about 35 miles from Pass island.

Proceeding northward, the beacons of Slott idead should be because in line bearings.

Proceeding northward, the beacons on Slut island should be brought in line, bearing N. 81° W., when Inner rock bears East, and should be kept in line, leading well clear of all known dangers, until Mitre rock bears West.

(Variation 1º Westerly in 1898.)

B. P. Chragh, Comdr., B.I.X., Port Officer of Calcutie.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 23rd February 1898.

NOTICE TO MARINERS-No. 54.

[Third Publication.] NEW ZEALAND-SOUTH ISLAND.

Westport-Alterations in lights and night tidal signals.

THE British Admiralty has given notice (No. 48 of 1898) that on 1st January 1898, the harbour lights and night tidal signals, hitherto shown at Westport, would be replaced by

The white harbour light, shown from the flagstaff on the western breakwater, without any additional signal, indicates: — Wait.
 A red light under the white harbour light, indicates: — Bar unsafe.

3. A green light over the white harbour light, indicates: - Bar safe for vessels of

A green light under the white harbour light, indicates:—Bar safe for vessels of

A white light under the white harbour light, indicates:—Bar safe for vessels of

6. Two red lights are shown, as fairway lights, from the beacons on the west side of the harbour within the breakwaters; the front beacon is painted white, the rear beacon, white with a red band.

These lights, when in line, bear S. by E. & E., and they should be kept in line over the bar and between the breakwaters, until the two red lights, shown from beacons on the western breakwater, are in line, bearing N. W. by N., when these last lights should be kept in line astern, up the river to the wharves.

7. The white harbour light is always shown; the red fairway lights are not shown

B. P. Cherge, Condr., R.I.N., Port Officer of Calcutta,

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 23rd February 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 56.

[Third Publication.]

BAY OF BENGAL-MADRAE COAST.

CAUTION.—Position of a submerged week. A TELEGRAPHIC communication has been received from the Presidency Port Officer, Kadras, stating that the Commander of the Nawab reports having passed a submerged wreck with most visible in Lat. 19° 26', North Long. 86° 11' East. Mariners are warned accord-

B. P. CREAGE, Comdr., B.I.M., Port Officer of Calcutta,

Published for general information.

T. H. CLOWES, Under-Scoretary, Marine Department.

Calcetta, the 26th February 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MARCH 23, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No 64.

[First Publication.]

OHINA SEA-PHILIPPINES-LUZON.

Manilla Lay-Light at St. Nicholas bank.

WITH reference to Notice to Mariners No. 226, dated 25th November 1895, issued by this office, the British Admiralty has given further notice (No. 83 of 1898) that information has been received that, in the latter part of 1897, a light would be exhibited from this

St. Nicholas bank light is an electric, flashing schitc light every minute, thus:—finch, twenty seconds; colipse, forty seconds; it is elevated 34 feet above high water, and visible from all directions (except in eight small arcs of about 3° each, the bearings of which are not given) a distance of 4 miles in clear weather.

The lighthouse is an iron tower, standing upon a pyramidal base of masonry, situated in a depth of 2 fathoms, the whole showing 36 feet above high water.

Approximate position, lat. 14° 26′ 50" N., long. 120° 45′ 20° E.

B. P. CRRAGH, Comde., B.I.M., Port Officer of Calcutta.

Published for general information.

Catevers, the 9th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT

NOTICE TO MARINERS-No. 65.

[First Publication.?

PACIFIC OCEAN-CAROLINE ISLANDS.

Yap island .- Light and buoys in port Tomil.

Tax British Admiralty has given notice (No. 85 of 1898) that the light (fixed red), previously exibited on the west side of the entrance to port Tomil, has been discontinued,

and is not likely to be re-exhibited for some years.

Approximate position, lat. 9° 29′ 15″ N., long. I38° 4′ 20° E.

Also, that buoys have been placed in the undermentioned positions; but as they begrently drift and are not at once replaced, they should not be relied on:—

1. A red buoy and a white buoy at the edge of the reef on the eastern side of the

2. Two red buoys at the entrance of the channel leading to Ruil.

A white buoy at the southern extremity of the reef extending southward from Engnoth island.

A mooring buoy south-westward of Tarrang island for the use of vessels coaling

there.

Nors.—Only small vessels, of less than 6 feet draught, can lie alongside the mole at Tarrang island; other vessels moor with an anchor from the bows and the stern secured to the mooring buoy.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Culcutta.

Published for general information.

OALGUTTA, the 9th March 1898.

T. H. CLOWES, Under-Socretary, Marine Department,

GOVERNMENT OF BENGAL -MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 46.

[First Publication.]

BAY OF BENGAL-NICOBAR AND KAMORTA ISLANDS.

Existence of certain dangers in these islands.

The Officer in charge of the Indian Marine Survey has given notice of the existence of the following dangers in the Nicobar islands:-

Great Nicobar.—A depth of 41 fathoms was obtained in lat. 6° 58′ 15″ N., long. 93° 40′ 00″ E., from which the left extreme of the land bore N. 27° W. Mount Thuillier N. 88 E. and Kopenheat point S. 80 E. This patch appeared to be small in extent with less water on it about 2 cables north of the depth of 41 fathoms.

St. George's channel, Kundul harbour.—A depth of 2½ fathoms was obtained in lat. 7' 11' 45" N., long. 93° 42' 50" E., S. 38° E., 9 cables from the S. E. point of Kondul island and S. 72½ W. 2'2 miles from the village. R. I. M. S. Elphinstone when steaming into Kondul harbour from the westward could get no bottom at 17 fathoms close to depths of 11. 16. 6. and 10 fathoms shown in Admiralty Chart No. 840.

Hamorta island.—A depth of 1 fathom was obtained in lat. 8° 07' N., long. 98° 26' E. with the left extreme of the laud (Kamorta Id.) bearing N. 9° E. Hill 435 feet N. 77½ E. and Mount Edgecombe 360 feet S. 37° E. A report was made to the Lieutenant in Command R. I. M. S. Elphinstone that breakers have been seen W. N. W. of Dring harbour.

All bearings are true.

This Notice affects Obart No. 8+0, Nicobar islands, and Sailing Directions, Bay of Bengal Pilot, 1892, pages 268, 269 and 272.

B. P. CREAGE, Comdr., R.I.K. Por Officer of Calculta.

Published for general information.

T. H. CLOWER, Under-Scoretery, Marine Department.

CALCUTEA, the 9th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 67. [First Publication.]

BAY OF BENGAL-BURMA COAST.

Date of exhibition of the 12-mile light.

WITH reference to Notice to Mariners No. 243, dated 27th December 1897, it sued by this Office, a further telegraphic communication has been received from the Port Officer. Rangoon, stating that the 12-mile light on Spit-light-vessel was exhibited from the 28th January last.

B. P. CHEAGH, Comdr., 2.I.M., Port Officer of Calomia.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 12th March 1898.

NOTICE TO MARINERS-No. 68. [First Publication.]

BAY OF BENGAL-BURNA COAST.

Baragua flate light vessel resumed station.

With reference to Notice to Mariners No. 238, dated 14th December 1897, issued by this office, the Port Officer, Rangoon, has given further notice that Berngua flata light-vessel has resumed her station exhibiting original light.—Temporary light-vessel withdrawn.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Oalcutta.

Published for general information.

CALOUTTA, the 12th Morch 1898.

T. H. CLOWIS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 69.

(First Publication.)

BAY OF BENGAL-BURMA COAST.

Gulf of Martaban-Exhibition of Amherst point light postponed.

With reference to Notice to Mariners No. 6, deted 14th January last, the Port Officer, Rangoon, has given further notice that the exhibition of Amherst point light has been postponed to the end of April next.

B. P. CREACH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

Cancurra, the 18th March 1898.

T. H. CLOWSE, Uniter-Secretary, Marine Department,

GOVERNMENT OF BENGAL, -MARINE DEPARTMENT. NOTICE TO MARINES-No. 70.

[First Publication.] SOUTH PACIFIC OCEAN-NEW ZEALAND.

Ice to the south-eastward.

The British Admiralty has given notice (No. 50 of 1898) that information has been received from the Manager of the Shaw Savill and Albion Company and others that large numbers of icebergs have been seen, during the months of November and December 1897, between the parallels of 46° 30° and 51° 0° South latitude and the meridians of 175 E°, and 165° W. longitude.

Icebergs in this area are rare, and Mariners are warned to avoid it for the present, if

practicable; or to exercise great caution if obliged to pass through it.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCURIA, the 14th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 71.

[First Publication.]

BAY OF BENGAL-ORISSA COAST.

Erratum.—In Notice to Mariners No. 34, dated 9th February, 1898 paragraph 1, lines 2 and 3, fer "N. 70° W." read "N. 79° W., and in paragraph 2, lines 3 and 4, for "transit marks," read "transit marks on."

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcuite,

Published for general information,

T. H. Clowes, Under-Secretary, Marine Department.

CALCUTTA, the 14th March 1898.

NOTICE TO MARINERS-No. 73.

[First Publication]

INDIA, SOUTH-INDIAN OCEAN.

A large red printed conical buoy with staff adrift.

THE Master of the S.S. Okara reports having passed at 0-20 a M., on the morning of the 4th instant, a large red painted conical buoy with staff, and with white letters on side B.L. or O.L. Position of ship Lat. 8-59 S. Long. 72-98 E.; current setting N. 49 E. 14 knots per hour.

B. P. CHEAGE, Comdr., B.I.N., Port Officer of Calcutta.

Published for general information.

T. H. Clawn, Under-Secretary, Murine Department,

CALCUTTA, the 16th Mirch 1899.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 78.

[Pirst Publication.]

AUSTRALIA, SOUTH-GOLF OF St. VINCENT.

Three buoys placed to mark the passage between Troubridge shouls and the main land.

THE President, Marine Board, Port Adelaide, has given notice (No. 1 of 1898) that to mark the passage between Troubridge Shouls and the mainland, three buoys have been placed, as mentioned hereunder.

1. A red buoy with framework and cone, in 10 ft. of water, L.W.S., on the west edge of the rest at the south entrance, with Troubridge lighthouse bearing N. 65° E. and Hungry Point N. 7° E.

2. On the south end of a sand spit in mid-channel a chequered buoy with framework and cone, in 12 ft. of water, L.W.S., Troubridge lighthouse bearing N. 80° E., Hungry Point N. 45° W.

3. On the north-west edge of the shoal off Troubridge Island a red buoy with framework and cone, in 2½ fathoms of water Troubridge lighthouse bearing S. 52° E, Hangy Point S. 58° W.

All bearings correct magnetic.

This affects Admiralty chart No. 2889A and plan No. 2152.

B. P. CREAGH, Comde., R.I.M., Port Officer of Calsu

Published for general information.

T. H. Crowns, Under-Secretary, Marine Departme

CALCUTTA, the 16th March 1898.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS—No. 74.
[First Publication.]

BAY OF BENGAL-BURNA COAST.

A sunkan native ressel.

A TRINGRAPHIC communication has been received from the Port Officer, Rangood, stating that the Master of the steamer Zulu reports having passed a sunken native vessel with deck load of bamboos above water, and mast standing, in Lat. 10° 12′ N., Long. 86° 55′ E.

B. P. CREAGH, Comdr., R.I.M., Part Officer of Coloutia.

Published for general information.

T. H. CLOWES, Under-Secretory, Marine Department.

CALOUTTA, the 17th March 1898.

NOTICE TO MARINERS-No. 76.

[First Publication.]

AUSTRALIA - PIONSER RIVER.

" New outrande thereto.

THE Port Master, Brisbane, has given notice (No. 6 of 1898) that the recent dyclone and foods at Mackay, Pioneer River, have breached East Point Spit, creating a new entrance and partially closing the main channel.

The new entrance will be marked for navigation as soon as possible, and due notice will be given; in the meantime masters of vessels are cautioned not to attempt to enter the river without a pilot.

Chart affected, No. 347.

Australia Directory, Vol. 2, page 246.

B. P. CSEAGH, Comdr., R.1.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 21st March 1898.

T. H. CLOWED, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 76.

[First Publication.]

AUSTRATIA.

Caution-Icobergs.

The Port Master, Brisbane, has given notice (No. 7 of 1898) that advices have been received from the Admiralty stating that numerous Icebergs will be encountered between Lautude 46.30° S. and Latitude 52° S., and between the meridians of 75° E. and 165° W.

Mariners intending to pass the area indicated are cautioned accordingly.

B. P. CREAGH, Comdr., R.LM. Port Officer of Calcutta.

Published for general information.

Calculta, the Blot March 1898

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 53.

[Second Publication.]

INDIAN OCEAN-MALACCA STRAITS.

A shoal not marked on Admirally chart.

The Master of the ship Tinto Hill reports the existence of a shoal not marked on Admiralty chart for Malacca strait; number of chart being 1355, sheet 2, having small corrections up to 1st January 1896, and large corrections to December 1885. The shoal referred to is a narrow strip of black sand about 50 fathoms long, N. N. W. and S. S. E. After tacking ship to N. by E. I. E., the following bearings were taken:

Ridge of and formula that W. has been strip as the strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal strip of the shoal st

Ridge of sand forming shoal W. by S. # S.

One—fathom bank light-house, N. # E.

Parcelar Hill—E. # N. ... One mile off.

Ship's head by standard compens, N. by B. + E.

Erfor 2d 26 Easterly.

(This cancels Notice to Mariners No. 45, dated 21st February 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowas, Under-Secretary, Marice Department.

Calcura, the 8th Murch 1698.

NOTICE TO MARINERS-No. 56.

[Third Publication.]

BAY OF BENGAL-BURMA COAST.

The " Medusa" first struck on a rook.

With reference to Notice to Mariners No. 44, dated the 21st February, issued by this office, the Port Officer, Rangoon, has given further notice that the Master of the steamer Meduca reports that that vessel first struck a rock two miles north-west of Table island before becoming a wreck in the position previously notified.

B. P. CREAGH, Comde., R.L.M., Part Officer of Calcule,

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the 1st March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 61.

[Third Publication.]

AUSTRALIA, INNER ROUTE-Howick GROUP.

Sunken rock westward of Houghton island.

The British Admiralty has given notice (No. 53 of 1898) of the existence of a root, with a depth of 18 feet on at low water springs, situated in a position with Howick island summit (206) bearing about N. 65° E., distant 2; miles; and western extreme of Howick island N. 7° W.

Approximate position, lat. 14° 31′ 20° 8., long. 144° 57′ 10° E.

(Variation 6° Easterly in 1898.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calculla.

Published for general information.

T. H. Clowns, Under-Secretary, Marine Department.

CALGOTTA, the 3rd March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 58.

[Third Publication.]

CELEBES, EAST COAST-GULF OF TOMENI.

Coral patch sastward of Silabian point.

THE British Admiralty has given notice (No. 54 of 1898) of the existence of a very small patch of sand and coral, with a depth of 3 feet on it, and no bottom at 70 fathous alose to all round, situated in a position about 8 miles eastward of Silabian point, or approximately in lat. 0° 21′ 0″ N., long. 120° 25′ 45″ E.

B. P. CREAGH, Comdr., E.1.M., Port Officer of Calcults.

Published for general information.

T. H. Olowen, Under-Secretary, Marine Department.

CALOUTTA, the 3rd March 1898.

NOTICE TO MARINERS-No. 69.

[Third Publication.]

OFTLON, SOUTH-WEST COAST-POIST DE GALLE APPROACH.

Non-existence of Luna Horowa rock.

THE British Admiralty has given notice (No. 55 of 1898) that information has been be received from the Master Attendant at Point de Galle, dated 22nd December 1897, that the Admiralty Charts, viz., bearing S.E. § S., distant 15 miles, from Unawatti point, and found not less than 10 fathems in that position.

The fishermen state that the name Horowa rock is applied to a 3-fathom patch, which the about a cable south-westward of Bellows rock, and on which the sea breaks heavily in the South-west monsoon, and that no other shoal is known in the vicinity.

Luna Horowa rock (P. D.) has consequently been expunged from the Admiralty Charts,

and the danger line has been extended one cable south-westward of Bellows rock.

Approximate position, Bellows rock, lat. 5° 59′ 45″ N., long. 80° 14′ 80″ E.

(Variation 1º Easterly in 1898.)

B. P. CREAGE, Comdr., R.I.K., Port Officer of Calcutta.

Published for general information,

CALCUTTA, the 3rd March 1898.

T. H. CLOWB', Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 60.

[Third Publication.]

NEW ZEALAND, SOUTH ISLAND- AWARNA OR BLOFF HARBOUR.

Buoys marking area of blasting operations.

The British Admiralty has given notice (No. 59 of 1898: that blasting operations are being carried on to remove Mid-channel rock, which is presumed to be the 19 feet rock, situated in the entrance to Bluff barbour, about N. by W. W., distant 51 cables, from the eastern extreme of Stirling point.

The area of the works is defined by four red buoys, and sil vessels should pass northward

of these buoys.

A note to that effect has been placed on the plan of the entrance on Chart No. 2540. Approximate position, lat. 46° 36′ 35″ S., long. 168° 22′ 55″ E.

(Variation 16° Easterly in 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 3rd March 1898.

T. H. CLOWRE, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 61.

[Third Publication.]

OHINA, EAST COAST-HAI TAN STRAIT.

Rock in north entrance.

The British Admiralty has given notice (No. 69 of 1898) that information has been received through the Board of Trade that, on Erd October 1897, the steam-vessel Namos track on a rock, which is said to lie about half a mile westward of Brown rock, north entrance of British and the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of the steam of of Hai ten strait.

The symbol for a rock with less than 6 feet water on it, with the words "Namoa rock (post approx")" written against it, has been placed on the Admiralty Chart in approximately lat, 25° 47′ 10° N., long. 119° 38′ 55″ B.

B. P. Carters. Condr., 2.1.N.

B. P. CHRAGH, Comdr., E.I.M., Port Officer of Unioutto.

Published for general information.

T. H. CLOWNS Under-Secretary, Marine Department.

. CALOUTTA, the Sed Morch 1-98.

NOTICE TO MARINERS-No. 62.

[Third Publication.] - MYUUR MOURT

EASTERN ARCHIPELAGO-BULETING (BELILING) ROAD.

Bubmarine telegraph cable moved eadward and light discontinued.

THE British Admiralty has given notice (No. 70 of 1898)—The Notherlands Government has given Notice, dated 26th January 1898, that the landing-place of the submarine telegraph cable in Buleleng (Beliling) road has been moved from the western to the eastern telegraph-cable house; and the prohibited suchbrage is now further eastward than the white come on the western angle of the western cable house in line with the white ball on the roof of that house. Consequently the red light, previously shown from the western eable house over the prohibited anchorage, has been discontinued; and the white cone, on the eastern angle of that house, has been withdrawn.

Approximate position, lat. 8° 5′ 45° S., long. 115° 5′ 6° E.

B. P. CREAGH, Comdr., E.I.N., Port Officer of Calculta.

Published for general information.

CALCUTEA, the 3rd March 1898.

T. H. Clowns, Under-Secretary, Marine Department.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MARCH 30, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 77.

[First Publication.]

AUSTRALIA, INNER ROUTE-MOUBILYAN HARBOUR.

Light on the southern North Barnard island.

THE British Admiralty has given notice (No. 100 of 1898) that a light is exhibited from a lighthouse recently erected on the southern North Barnard island, southern approach to

orth Barnard island light is a sixth or cr., group-flushing white light, showing two flushes every ten ascends; elevated 292 feet above high water, and visible approximately from N. ‡ E., through north and west, to S.E. ‡ E., a distance of 16

The lighthouse, 10 feet high, is a cylindrical lantern standing on a concrete base, painted white.

Approximate position on chart No. 2349, lat. 17° 40′ 50" S., long. 146° 11′ 0" E.

Should the flashing apparatus fail to work at any time, a fixed light, of small power, will be exhibited.

(Variation 6° Easterly in 1898.)

B. P. ORBAGH, Comdr., R.1.M., Port Officer of Unleutte.

Published for general information.

OLLOUTEL, the 26th March 1898.

T. H. CLOWIS. Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTIOR TO MARINERS-No. 78.

[First Publication.]

CHINA SEA-HAINAN STRAIT.

South channel-Alteration in position of Hainan head bank buoy.

The British Admiralty has given notice (No. 101 of 1898) that, in consequence of the extension of Hainan head bank to the south-westward, Hainan head bank broy has been a fathons at low water springs, in a position with Hainan bluff summit (173) bearing S.W. Approximately Market and Sand-bill (100) south.

Approximate position, lat. 20° 9' 55" N., long. 110° 42' 10° E.

(Variation 2º Rasterly in 1898.)

B. P. CREAGH, Comde., R.I.M. Port Officer of Calcutta.

Published for general information.

March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 79.

[First Publication.] AFRICA, EAST COAST-DELAGOA BAY.

Lighthouse building northward of Cockburn shoal.

THE British Admiralty has given notice (No. 104 of 1898) that information has been received from Lieutenant and Commander J. W. Pochin, H.M.S. Thrush, dated 15th January 1898, that works are in progress for the purpose of erecting a lighthouse northward of Cockburn shoal, in a position with Gibbon point beacon bearing S. 23° W., distant 4 to miles and cape Inyack lighthouse S. 21° E.

Approximate position, lat. 25° 53' 20" S., long. 82° 54' 10" E.

(Variation 23° Westerly in 1898.)

B. P. Camann, Condr., L.L., Port Officer of Calcults.

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department.

CALCUTTA, the 26th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 80.

[First Publication.] JAPAN-SETO UCHI.

(1) Shoal south-eastward of Sei sima.

The British Admiralty has given notice (No. 109 of 1898) that the Master of the steam-vessel Naramaru reports the existence of a sandy shoal, about a cable in length east and west, with a depth of 22 fathoms on it at low water springs and 4 to 7 fathoms around, situated in a position with Sei sime summit (360) bearing N.W., distant 5 cables; and Take artistic summit (200) S.W. Tako saki summit (890) S.W.

Approximate position, lat. 84° 21′ 0° N., long. 133° 51′ 20° E.

(2) Shool north-sestioard of Tadetsu.

Also, of the existence of a shoal, with a depth of 3 fathoms on it at low water springs extending about 2 cables north-west and south-east, situated in a position with the lantern at Tadotsu bearing S.E. \(\frac{1}{2} \) S., distant 9 cables; and Kigasa sims summit (230) S.W. \(\frac{1}{2} \) W.

Approximate position, lat. 84° 17′ 10° N., long. 138° 43′ 85″ E.

(Variation 4º Westerly in 1898.)

B. P. CREAGH, Comdr., B.1.M., Port Officer of Calculis.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the 26th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 81.

[First Publication.]

JAVA, EAST COAST-BANJUWANGI ROAD.

Existence of a sunken rock.

THE British Admiralty has given notice (No. 111 of 1898) of the existence of a rock-with a depth of 3% fathoms on it at low water springs, situated southward of Depthford rocks in a position with Banjuwangi lighthouse bearing S. W. & W., distant 3 cables.

Approximate position, lat. 8° 12' 80" S., long. 114° 22' 55" B.

(Variation 2º Rasterly in 1898.)

B. P. CREAGH, Coundr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Socretary, Marine Department.

CALGUTTA, the 26th March 1898.

NOTICE TO MARINERS-No. 82.

[First Publication.] NEW ZEALAND-Brewart ISLAND.

(1) Patersen inlet - Sunken rock southward of Kaipipi bay.

The British Admiralty has given notice (No. 112 of 1898) of the existence of a pinnacle rock, with a depth of 31 fathoms on it at low water, and deep water around, situated 15 cables eastward of the south entrance point of Kaipipi hay.

The 5-fathom line round the shore has been extended outside this rook.

Approximate position on plan No. 2541, lat. 46° 55′ 10° 8., long. 168° 5′ 15" E.

(2) Sunken rock conth-eastward of Codfish island.

Also, of the existence of a rock of small extent, with a depth of 3 feet on it at low water, situated a third of a mile from the south-east side of Codfish island, in a position with High rock bearing N. E. by N., distant 1 mile.

Approximate position on chart No. 2558, lat. 45° 48' 10° 5., long. 167° 42' E. (Variation 17° Easterly in 1898.)

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta

Published for general information.

Calcura, the 26th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 64.

(Second Publication.)

OHINA SEA-PHILIPPINES-LUZON,

Manilla bay—Light at St. Nicholas bank.

With reference to Notice to Mariners No. 226, dated 25th November 1895, issued by this office, the British Admiralty has given further notice (No. 83 of 1898) that information has

been received that, in the latter part of 1897, a light would be exhibited from this beacon.

St. Nicholas bank light is an electric, flashing white light every minute, thus:—flash, freenty seconds; celipse, forty seconds; it is elevated 34 feet above high water, and visible from all directions (except in eight small arcs of about 3° each, the bearings of which are not given) a distance of 4 miles in clear weather.

The lighthouse is an iron tower, standing upon a pyramidal base of masonry, situated in a depth of 2 fathoms, the whole showing 36 feet above high water.

Approximate position, lat. 14° 26' 50" N., long. 120° 45' 20" E.

B. P. CRBAGH, Comde., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 9th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT

NOTICE TO MARINERS-No. 66.

[Second Publication.]

PACIFIC OCEAN-CAROLINE ISLANDS.

Yap island.—Light and buoys in port Tomil.

The British Admiralty has given notice (No. 85 of 1898) that the light (Acad red), previously exibited on the west side of the entrance to port Tomil, has been discontinued, and is not likely to be re-exhibited for some years.

Approximate position, lat. 9° 29′ 15° N., long. 138° 4′ 20° E.

Also, that buoys have been placed in the undermentioned positions; but as they frequently drift and are not at once replaced, they should not be relied on:—

1. A red buoy and a white buoy at the edge of the reef on the eastern side of the entrance.

2. Two red buoys at the entrance of the channel leading to Rull.
3. A white buoy at the southern extremity of the reef extending southward from Engnoth island.

A mooring buoy south-westward of Tarrang island for the use of vessels coaling there. Norz.—Only small vessels, of less than 6 feet draught, can lie alongside the mole at Tarrang island; other vessels moor with an anchor from the bows and the stern secured to the mooring buoy.

B. P. OREAGH, Condr., R.I.M., Port Officer of Calcula.

Published for general information.

CALCUTTA, the 9th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 66.

[Second Publication.]

BAY OF BENGAL-NICOBAR AND KAMORTA ISLANDS.

Existence of certain dangers in these islands.

THE Officer in charge of the Indian Marine Survey has given notice of the existence of the following dangers in the Nicobar islands:—

Great Nicobar.—A depth of 4½ fathoms was obtained in lat. 6° 58′ 15° N., long. 98° 40′ 00° E., from which the left extreme of the land bore N. 27° W. Mount Thuillier N. 38 E. and Kopenheat point S. 80 E. This patch appeared to be small in extent with less water on it about 2 cables north of the depth of 4½ fathoms.

St. George's channel, Kondul harbour.—A depth of 2½ fathoms was obtained in lat. 7° 11′ 45″ N., long. 93° 42′ 50″ E., S. 33° E., 9 cables from the S. E. point of Kondul island and S. 72½ W. 2°2 miles from the village. R. I. M. S. Elphinstone when steaming into Kondul harbour from the westward could get no bottom at 17 fathoms close to depths of 11. 16. 6. and 10 fathoms shown in Admiralty Chart No. 840.

Kamorta island.—A depth of 1 fathom was obtained in lat. 8° 07' N., long. 93° 26' E. with the left extreme of the land (Kamorta Id.) bearing N. 9° E. Hill 435 feet N. 77; E. and Mount Edgecombe 360 feet S. 37° E. A. report was made to the Lieutenant in Command R. I. M. S. Elphinstone that breakers have been seen W. N. W. of Dring harbour.

All bearings are true.

This Notice affects Chart No. 810, Nicobar islands, and Sailing Directions, Bay of Bengal Pilot, 1892, pages 268, 269 and 272.

B. P. Caragh, Comdr., R.L.M., Por Officer of Calcuita.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

OALOUTTA, the 9th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS—No. 67.

(Second Publication.)

BAY OF BENGAL—BUBMA COART.

Date of exhibition of the 12-mile light.

With reference to Notice to Mariners No. 248, dated 27th December 1897, is sued by this Office, a further telegraphic communication has been received from the Port Officer. Rangoon, stating that the 12-mile light on Spit-light-vessel was exhibited from the 28th January last.

B. P. CREAGE, Comdr., RJ.M., Port Officer of Calcutta.

Published for general information.

T. H. Olowes, Under-Secretary, Marine Department.

CALGUSTA, the 12th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS—No. 68.

[Second Publication.]

BAY OF BENGAL—BURNA COAST.

Baragua flate light ressel resumed station.

Wirm reference to Notice to Mariners No. 238, dated 14th December 1897, issued by this office, the Port Officer, Rangoon, has given further notice that Baragua flats light-vessel has resumed her station exhibiting original light.—Temporary light-vessel withdrawn.

B. P. CREAGH, Comdr., B.1.M., Port Officer of Oslowita.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 18th March 1898.

NOTICE TO MARINERS-No. 69.

[Second Publication.] BAY OF BENGAL-BURNA COAST.

Gulf of Martaban-Exhibition of Amherst point light postponed.

With reference to Notice to Mariners No. 6, dated 14th January last, the Port Officer, Rangoon, has given further notice that the exhibition of Amherst point light has been

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcuttu.

Published for general information.

CALCUTTA, the 18th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, - MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 70.

[Second Publication.] SOUTH PACIFIC OCEAN-NEW ZEALAND.

Lee to the south-eastward.

THE British Admiralty has given notice (No. 50 of 1898) that information has been received from the Manager of the Shaw Savill and Albion Company and others that large numbers of icebergs have been seen, during the months of November and December 1897, between the parallels of 46° 30′ and 51° 1° South latitude and the meridians of 175 E°. and 165° W. longitude.

Icebergs in this area are rare, and Mariners are warned to avoid it for the present, if practicable; or to exercise great caution if obliged to pass through it.

B. P. CREAGE, Comdr., R.I.M., Port Officer of Caloutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUITA, the 14th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 71.

[Second Phlication.]

BAY OF BENGAL-ORISSA COAST.

Brratum.—In Notice to Mariners No. 34, dated 9th February, 1898 paragraph 1, lines 2 and 3, for "N. 70° W." read "N. 79° W., and in paragraph 2, lines 3 and 4, for "transit marks on."

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUITA, the 14th March 1898.

T. H. CLOWES, Under-Booretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 73.

[Second Publication.]

INDIA, SUUTH-INDIAN OCEAN.

A large red painted conical buoy with etaff adrift.

The Master of the S.S. Okara reports having passed at 0-20 a.m., on the morning of the 4th instant, a large red pointed conical buoy with staff, and with white letters on side B.L. or C.L. Position of ship Lat. 3-59 S. Long. 72-06 E.; current setting N. 49 El. 14 hots per hour.

B. P. CREAGE, Comdr., R.L.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

Calcorra, the 16th March 1898.

NOTICE TO MARINERS-No. 78.

[Second Publication.]

AUSTRALIA, SOUTH-GULF OF Sr. VINCENT.

Three buoys placed to mark the passage between Troubridge shoats and the main land.

The President, Marine Board, Port Adelaide, has given notice (No. 1 of 1898) that to mark the passage between Troubridge Shoals and the mainland, three buoys have been placed, as mentioned hereunder.

1. A red buoy with framework and cone, in 10 ft. of water, L.W.S., on the west edge of the reef at the south entrance, with Troubridge lighthouse bearing N. 65° E. and Hungry Point N. 7° E.

2. On the south end of a sand spit in mid-channel a chequered buoy with framowork and cone, in 12 ft. of water, L.W.S., Troubridge lighthouse bearing N. 80° E., Hungry Point N. 45° W.

3. On the north-west edge of the shoal off Troubridge Island a red buoy with framework and cone, in 21 fathoms of water Troubridge lighthouse bearing S. 62° E, Hungry Point S. 68° W.

All bearings correct magnetic.

This affects Admiralty chart No. 2389A and plan No. 2152.

B. P. CREAGH, Condr., R.I.K., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 16th March 1898.

GOVERNMENT OF BENGAL,-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 74.

(Second Publication.)

BAY OF BENGAL-BURMA COAST.

A sunken native vessel.

A TELEGRAPHIC communication has been received from the Port Officer, Rangeon, stating that the Master of the steamer Zulu reports having passed a sunken native vessel with deck load of hamboos above water, and mast standing, in Lat. 10° 12′ N., Long. 86° 55′ E.

B. P. CREAGE, Comdr., R.I.M., Part Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department

CALCUTTA, the I'th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 75.

[Second Publication.]

AUSTRALIA-PIONEER BIVER.

New entrance thereto.

The Port Master, Brisbane, has given notice (No. 6 of 1898) that the recent cyclone and floods at Mackay, Pioneer River, have breached East Point Spit, creating a new entrance and partially closing the main channel.

The new entrance will be marked for navigation as soon as possible, and due notice will be given; in the meantime masters of vessels are cautioned not to attempt to enter the river without a pilot.

Chart affected, No. 347.

Australia Directory, Vol. 2, page 246.

B. P. CREAGH, Comdr., w.1. M.,

Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUTTA, the \$1st March 1898.

NOTICE TO MARINERS-No. 76.

(Second Publication.) AUSTRALIA.

Caution-Icobergs.

The Port Master, Brisbane, has given notice (No. 7 of 1898) that advices have been received from the Admiralty stating that numerous Icebergs will be encountered between Latitude 46.30° S. and Latitude 52° S., and between the meridians of 75° E. and 165° W.

Mariners intending to pass the area indicated are cautioned accordingly.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 21st March 1898.

T. H. OLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 63,

[Third Publication.]

INDIAN OCEAN-MALACCA STRAITS.

A shoal not marked on Admirally chart.

The Master of the ship Tinto Hill reports the existence of a sheal not marked on Admiralty chart for Malacca strait; number of chart being 1365, sheet 2, having small referred to is a narrow strip of black sand about 50 fathoms long, N. N. W. and S. S. E. After tacking ship to N. by E. & E., the following bearings were taken:—

Ridge of sand forming shoal W. by S. 7 S. ... One—fathom bank light-house, N. 1 E. Parcelar Hill—E. 1 N. One mile off. Ship's head by standard compass, N. by E. ? E.

Error 2° 26' Easterly.

(This cancels Notice to Mariners No. 45, dated 21st February 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALOUTTA, the 8th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, APRIL 6, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 88.

[First Publication.]

AFRICA, EAST COAST-ZANZIBAR AND PEMBA ISLANDS.

(I) Zanzibar island-Information on ocrtain lights,

THE following Notice to Mariners (No. 122 of 1898) issued by the British Admiralty is republished:

The undermentioned information, relative to certain lights in Zanzibar, has been received from the Port Officer, dated 19th January 1898:—

- (a) A lighthouse is in course of erection on the west side of Chumbe, in approximate-ly lat. 6° 16′ 45″ S., long. 39° 10′ 35″ E.
- (b) Two red lights are shown at the landing-place at Zanzibar about a cable southeastward of Rus Shangani, and two green lights at the landing-place about a cable north-sastward of Rus Shangani.

Approximate position, Ras Shangani, lat. 6° 9′ 45° S., long. 80° 11′ 5° E.

(c) The word "unreliable" written against Mungopani light, in approximately lat. 5° 57′ 10″ S., long. 39° 10′ 50″ E., has been expanged from the Charts. This light is elevated 113 feet above high water. The lighthouse is 73 feet in height.

(d) Mwana Mwana light, in approximately lat. 5° 45′ 10″ S., long. 39° 18′ 10″ E., is elevated 115 feet above high water.

- (e) Ras Nungwe light, in approximately lat. 5° 43′ 5° S., long. 39° 18′ 5° E., has been altered from a revolving to a fixed light, is clovated 105 feet above high water (as before), and visible in clear weather from a distance of 12 miles. The lighthouse is 45 feet in height.
 - (2) Pemba island-Flagstaffs in Chaki Chaki bay.

Also, that the undermentioned flagstaffs have been erected in Chaki Chaki bay :-

- (a) On the west side of Mesale island, in approximately lat. 5° 11′ 25″ S., long. 39° 35′ 55″ E.
- (b) On the east side of Ras Tundauwa, in approximately lat. 5° 15′ 20° S., long 39° 41′ 20° E.

P. J. Falle, Comdr., B.I.W., Port Officer of Calcuita.

Published for general information,

T. H. CLOWES, Under-Secretary, Marine Department.

OALCUTTA, the 1st Apr.l 1898

NOTICE TO MARINERS-No. 84.

[First Publication.]

PERSIAN GULF-SHATT-AL-ARAB OR BASEA RIVER.

A dangerous shoal.

The Officer in charge of the Marine Survey of India has given notice that information has been received from Lieutenaut Kendali, R. I. M., Commanding R. I. M. S. Laurence, that a very dangerous shoal, varying in depth, forms in the Shatt-al-Arab or Basta river about 5½ cables to the southward of Muhammera Palace below the junction of the Karun and Shatt-al-Arab rivers: Approximate position lat. 30° 22′ 15° N., long. 48° 12′ 36° E. It is at its worst when the rivers Dis and Karun are in flood, independent of the rivers Tigris and Euphrates, and being much modified when these rivers are in flood simultaneously; and barely perceptible when the Euphrates and Tigris are in flood first. It is generally expected about the month of February. The least depth of water at L. W. S. found in February 1898 was 4 feet. The deepest water at that time was between the shoal and Dabba island, by keeping close to the island the least water a vessel would pass over was then 9 feet at L. W. S.

Chart affected: -No. 1235 and Persian Gulf Pilot, 1890, page 295.

P. J. PALLE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 1st April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 85.

[First Publication.]

BAY OF BENGAL-ANDAMAN AND NICOBAR ISLANDS.

Position of certain shoals.

THE Officer in charge of the Marine Survey of India has given notice of the existence of the following shoals --

No. 1.-A shoal east of 2 fathoms at L. W. springs has been obtained by R. I. M. S., Nancoury on the Livermore shoal in the following position:-

Lat, 15° 12′ 15" N., long. 97° 40′ 39" E. with-

Phalein Hill (1610) bearing 841 Summit of Stag island ... N. 89° E. *** 8. 23° E. Summit of Pig island 110

No. 2.—A shoal of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 15° 04½" N., long. 97° 36° E. with—

The summit of Pig island bearing ... S. 84° E. Phalein Hill (1610) ... N. 38° E. Kennangi S. Peak ... S. 65° E.

No. 3.—A shoal of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 14° 53′ N., long. 97° 20½′ E., with Kennangi (2580) S. Peak bearing N. 81° E., distant 303 miles.

As none of these shoals have been minutely examined, it is possible less water may exist on them.

All bearings are true.

Charts affected.—Nos. 1272, 823, 830, 70, Sailing Directions, Bay of Bengal Pilot second edition 1892, page 362.

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcullu.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALGUERA, the 1st April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 77.

[Second Publication.]

AUSTRALIA, INNER ROUTE-MOURLINAN HARBOUR.

Light on the southern North Barnard island.

THE British Admiralty has given notice (No. 100 of 1898) that a light is exhibited from a lighthouse recently erected on the southern North Barnard island, southern approach to Moorilyan harbour :

North Barnard island light is a sixth orer, group-flashing white light, showing two flashes every ten seconds; elevated 292 feet above high water, and visible approximately from N. ‡ E, through north and west, to S.E. ‡ E., a distance of 16

The lighthouse, 10 feet high, is a cylindrical lantern standing on a concrete base,

Approximate position on chart No. 2349, lat. 17° 40° 50° 8., long. 146° 11′ 0° E. Should the flashing apparatus fail to work at any time, a fived light, of small power, will be exhibited.

(Variation 6° Easterly in 1898.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWNS. Under-Secretary, Marine Department.

LIMUTTA, the 26th March 1698.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 76. [Second Publication.] OHINA SEA-HAINAN STRAIT.

South channel-Alteration in position of Hainan head bank buoy.

The British Admiralty has given notice (No. 101 of 1898) that, in consequence of the extension of Hainan head bank to the south-westward, Hainan head bank buoy has been moved about 2 cables, W.S.W., from its previous position; and is now moored in a depth of fathoms at low water springs, in a position with Hainan bluff summit (173) bearing S.W. W., W., distant 14 miles; and sand-bill (100) south.

Approximate position, lat. 20" 9' 55" N., long. 110° 42' 10" E.

(Variation 2º Basterly in 1898.)

B. P. CREAGH, Condr., R.I.H.,
Port Officer of Calcutia.

Published for general information.

T. H. CLOWES. Under-Secretary, Marine Department.

Osloutra, the 26th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 79.

[Second Publication.] AFRICA, EAST COAST-DELAGOA BAY.

Lighthouse building northward of Cockburn shoal.

The British Admiralty has given notice (No. 104 of 1898) that information has been received from Lieutenant and Commander J. W. Pochin, H.M.S. Thrush, dated 15th of Cockburn shoul, in a position with Gibbon point beacon bearing S. 23° W., distant 4 10 miles and cape Inyack lighthouse S. 21° E.

Approximate position, lat. 25° 58' 20° S., long. 32° 54' 10" E.

(Variation 25° Westerly in 1808.)

B. P. CREAGE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

Oblighta, the 28th March 1898.

NOTICE TO MARINERS-No. 80.

[Second Publication.] JAPAN-Sero Ucur

(1) Bhout south onstword of Sei s.ms.

THE British Admiralty has given notice (No. 109 of 1898) that the Master of the steam-vessel Naramara reports the existence of a sandy shoal, about a cable in length east and west, with a depth of 24 fathoms on it at low water springs and 4 to 7 fathoms around, situated in a position with Sci sima summit (300) bearing N.W., distant 5 cables; and Tako saki summit (390) S.W.

Approximate position, lat. 34° 21′ 0° N., long. 138° 51′ 20° E.

(2) Shoal north-westward of Tadoteu.

Also, of the existence of a shoal, with a depth of 3 fathoms on it at low water springs, extending about 2 cables north-west and south-east, situated in a position with the luntern at Tadotsu bearing S.E. ‡ S., distant 9 cables; and Kigasa sima summit (230) S.W. ‡ W.

Approximate position, lat. 34° 17′ 10" N., long. 185° 43′ 85" E.

(Variation 4° Westerly in 1898.)

B. P. CREAGH, Comde., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department

CALCUTTA, the 26th Merch 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 81.

[Second Publication.]

JAVA, EAST COAST-BANJUWANGI ROAD.

Existence of a sunken rock.

THE British Admiralty has given notice (No. 111 of 1898) of the existence of a rock, with a depth of 3% fathoms on it at low water springs, situated southward of Depthford rocks in a position with Banjuwangi lighthouse bearing S. W. & W., distant 8 cables.

Approximate position, lat. 8° 12′ 80″ S., long. 114° 22′ 55″ E.

(Variation 2º Easterly in 1898.)

B. P. CREAGU, Comdr., B.I.M. Port Officer of Calculta.

Published for general information.

CALCUITA, the 26th March 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 82.

[Second Publication.]

NEW ZEALAND-STEWART ISLAND.

(1) Patersen inlet-Sunken rock southward of Kaipipi bay.

THE British Admiralty has given notice (No. 112 of 1898) of the existence of a pinnacle rock, with a depth of 31 fathoms on it at low water, and deep water around, situated 13 cables eastward of the south entrance point of Kaipipi bay.

The 5-fathom line round the shore has been extended outside this rock.

Approximate position on plan No. 2541, lat. 46° 55′ 10° S., long. 168° 5′ 15° E.

(2) Sunken rook south-eastward of Codfish island.

Also, of the existence of a rock of small extent, with a depth of 3 feet on it at low water, situated a third of a mile from the south-east side of Codfish island, in a position with High rock bearing N. E. by N., distant 1 mile.

Approximate position on obsert No. 2558, lat. 46° 48′ 10° S., long. 167° 42′ E. (Variation 17° Easterly in 1898.)

B. P. CREAGE, Comdr., B.I.M. Port Officer of Calcutta.

Published for general information.

T. H. CLOWES. Under Secretary, Marine Department.

Oaleptra, the 26th March 1808.

NOTICE TO MARINERS-No. 64,

[Third Publication.]
OHINA SEA-PHILIPPINES-LUZON.

Munilla bay-Light at St. Nicholas bank.

With reference to Notice to Mariners No. 226, dated 25th November 1895, issued by this office, the British Admiralty has given further notice (No. 83 of 1898) that information has been received that, in the latter part of 1897, a light would be exhibited from this beacon. St. Nicholas bank light is an electric, flashing white light every minute, thus:—flash, twenty ecconds; eclipse, forty ecconds; it is elevated 34 feet above high water, and visible from the latter part of short 3° each, the heavings of which are not risks.

all directions (except in eight small area of about 3° each, the hearings of which are not given) a distance of 4 miles in clear weather.

The lighthouse is an iron tower, standing upon a pyramidal base of masoury, situated in a depth of 2 fathoms, the whole showing 36 feet above high water.

Approximate position, lat. 14° 26′ 50" N., long. 120° 45′ 20" E.

B. P. Caran, Comdr., s.t.M., Port Officer of Calcutta,

Published for general information.

CALCUTTA, the 9th March 1898.

T. H. CLOWER, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT

NOTICE TO MARINERS-No. 66.

[Third Publication.]

PACIFIC OCEAN-CAROLINE ISLANDS.

Yap island.—Light and buoys in part Tomil.

Tue British Admiralty has given notice (No. 85 of 1898) that the light (fixed red), previously exibited on the west side of the entrance to part Tomit, has been discontinued,

Approximate position, lat. 9° 29′ 15° N., long. 138° 4′ 20° E.

Also, that buoys have been placed in the undermentioned positions; but as they frequently drift and are not at once replaced, they should not be relied on;—

I. A red buoy and a white buoy at the edge of the reef on the eastern side of the

Two red buoys at the entrance of the channel leading to Rull.

A white buoy at the southern extremity of the reef extending southward from

4. A mooring buoy south-westward of Tarrang island for the use of vessels coaling there Nors.—Only small vessels, of less than 6 feet draught, can lie alongside the mole at Tarrang island; other vessels moor with an anchor from the bows and the stern secured to

B. P. ORRAGH, Comdr., R.I.M., Port Officer of Culcutta.

Published for general information.

CALOUTEA, the 9th March 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL -MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 60.

[Third Publication.]

BAY OF BENGAL-NICOBAR AND KAMORTA ISLANDS.

Existence of certain dangers in these islands.

THE Officer in charge of the Indian Marine Survey has given notice of the existence of the following dangers in the Nicobar islands:-

Great Nicobar.—A depth of 4½ fathoms was obtained in lat. 6° 58′ 15° N., long. 93° 40′ E., from which the left extreme of the land bore N. 27° W. Mount Thuillier N. 36 E. and Kopenheat point S. 80 E. This patch appeared to be small in extent with less water on it about 2 cables north of the depth of 4½ fathoms.

St. George's channel, Kondul harbour.—A depth of 2½ fathoms was obtained in lat. 7° 11′ 45″ N., long. 93° 42′ 50″ E., S. 33° E., 9 cables from the S. E. point of Kondul island and S. 72½ W. 22 miles from the village. R. I. M. S. Elphinstone when steaming into It. 16. 6. and 10 fathoms shown in Admiralty Chart No. 840.

The stand—A depth of 1 fathom was obtained in lat. 8° 07′ N., long. 93° 26′ E. with the left extreme of the land (Kamorta Id.) bearing N. 9° E. Hill 435 feet N. 77½ E. and Mount Edgecombe 360 feet S. 37° E. A report was made to the Lieutenant in lat. 10 fathom. S. Elphinstone that breakers have been seen W. N. W. of Dring labour.

All bearings are true.

This Notice affects Chart No. 810, Nicobar islands, and Sailing Directions, Bay of Bengal Pilot, 1892, pages 268, 269 and 272.

B. P. OBBAGH, Comdr., R.I.M. Por Officer of Oaketta.

Published for general information.

T. H. CLOWSE, Under-Beerstary, Marine Department.

CALCUTTA, the 9th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT. NOTICE TO MARINERS-No. 67.

[Third Publication] BAY OF BENGAL-BURMA COAST.

Date of exhibition of the 12-mile light.

With reference to Notice to Mariners No. 243, dated 27th December 1897, is sued by this Office, a further telegraphic communication has been received from the Port Officer, Rangoon, stating that the 12-mile light on Spit-light-vessel was exhibited from the 28th January last.

B. P. CREAGE, Comdr., R.LM., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES. Under-Secretary, Marine Department.

CALGUTTA, the 12th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 68.

[Third Publication.]

BAY OF BENGAL-BURMA COAST.

Baragua flats light cessel resumed station.

Wirm-reference to Notice to Mariners No. 238, dated 14th December 1897, issued by this office, the Port Officer, Rangoon, has given further notice that Baragna flats light-vessel has resumed her station exhibiting original light.—Temporary light-vessel withdrawn.

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calculta.

Published for general information.

T. H. Clowns, Under-Secretary, Marine Department.

CALCUTTA, the 18th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 69.

[Third Publication.]

BAY OF BENGAL-BURNA COAST.

Gulf of Martaban - Exhibition of Amherst point light postponed.

With reference to Notice to Mariners No. 6, dated 14th January last, the Port Officer, Rangoon, has given further notice that the exhibition of Amherst point light has been postponed to the end of April next.

B. P. OREAGH, Comdr., R.I.M., Port Officer of Calcula.

Published for general information.

CALCUTTA, the 18th March 1898.

T. H. CLOWSS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, - MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 70.

[Third Publication.] SOUTH PACIFIC OCEAN-New ZBALAND.

Ice to the south-eastward.

THE British Admiralty has given notice (No. 60 of 1898) that information has been received from the Manager of the Shaw Savill and Albion Company and others that large numbers of inebergs have been seen, during the months of November and December 1897,

between the parallels of 46° 80' and 51° 0' South latitude and the meridians of 175 E°. and 165° W. longitude.

Icebergs in this area are rare, and Mariners are warned to avoid it for the present, if practicable; or to exercise great caution if obliged to pass through it.

B. P. CREAGE, Comdr., R.LM., Port Officer of Calcutta.

Published for general information.

T. H. Clowns, Under-Secretary, Marine Department.

CALEBERA, the 14th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINEES-No. 71. [Third Publication.]

BAY OF BENGAL-ORISSA COAST.

Erratum.—In Notice to Mariners No. 34, dated 9th February, 1898 paragraph 1, lines 2 and 8, for "N. 70° W." read "N. 79° W, and in paragraph 2, lines 3 and 4, for "transit marks on."

B. P. CREAGH, Comdr., B.L.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 14th March 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS—No. 73.

[Third Publication.]

INDIA, SOUTH—Indian ocean.

A large red painted conical buoy with staff adrift.

THE Master of the S.S. Okara reports having passed at 0-20 a.m., on the morning of the 4th instant, a large rod painted conical buoy with staff, and with white letters on side B.L. or O.L. Position of ship Lat. 8-50 S. Long. 72-06 E.; current setting N. 49 E. 1; lucts per hour.

B. P. CHEAGH, Comdr., R.1.N., Port Officer of Calcutta.

Published for general information.

T. H. Clawis, Under-Secretary, Murine Department

Calourra, the 16th March 1898,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 78.

[Third Publication.]

AUSTRALIA, SOUTH-GULF OF ST. VINCENT.

Three buoys placed to mark the passage between Trombridge shoals and the main land.

The President, Marine Board, Port Adelaide, has given notice (No. 1 of 1898) that to mark the passage between Troubridge Shoals and the mainland, three buoys have been placed, as mentioned hereunder.

1. A red buoy with framework and cone, in 10 ft. of water, L.W.S., on the west edge of the reef at the south entrance, with Troubridge lighthouse bearing N. 65° E. and Hungry Point N. 7° E.

2. On the south end of a sand spit in mid-channel a chequered buoy with framework and cone, in 12 ft. of water, L.W.S., Troubridge lighthouse bearing N. 80° E., Hungry Point N. 45° W.

3. On the north-west edge of the shoal off Troubridge Island a red buoy with framework and cone, in 2; fathoms of water Troubridge lighthouse bearing S. 62° E, Hungry Point S. 58° W.

All bearings correct magnetic.

This affects Admiralty chart No. 2889A and plan No. 2152.

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information,

CALOUTTA, the 16th March 1898. Under-Secretory, Marine Department.

NOTICE TO MARINERS-No. 74.

[Third Publication.] BAY OF BENGAL-BURNA COAST.

A minken native cessel.

A TELEGRAPHIC communication has been received from the Port Officer, Rangoon, stating that the Master of the steamer Zule reports having passed a sanken native vessel with deck load of bamboos above water, and mast standing, in Lat. 10° 12′ N., Loag. 86° 55' E.

B. P. CREAGE, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. OLOWBE, Under-Secretary, Marine Department.

CALCUTTA, the 17th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 75.

[Third Publication.] AUSTRALIA-PIONERE RIVER.

New entrance thereto.

THE Port Master, Brisbane, has given notice (No. 6 of 1898) that the recent cyclone and floods at Mackay, Pioneer River, have breached East Point Spit, creating a new entrance and partially closing the main channel.

The new entrance will be marked for navigation as soon as possible, and due notice will be given; in the meantime masters of vessels are cautioned not to attempt to enter the river without a pilot.

Chart affected, No. 847.

Australia Directory, Vol. 2, page 246.

B. P. Cunaga, Comde., s.1.st., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 21st March 1898.

T. B. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 76.

(Third Publication.) AUSTRALIA.

Caution-Iceberge.

THE Port Master, Brisbane, has given notice (No. 7 of 1898) that advices have been received from the Admiralty stating that numerous Icebergs will be encountered between Latitude 46:30° S. and Latitude 62° S., and between the meridians of 75° E. and 165° W.

Mariners intending to pass the area indicated are cautioned accordingly.

B. P. CREACH, Condr., R.L.M.,

Port Officer of Calculia.

Published for general information.

CALCUTTA, the 21st March 1898.

T. H. CLOWBS, Under-Secretary, Marine Department.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, APRIL 13, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 86. [First Publication.]

NEW ZEALAND-NORTH ISLAND, KAIPARA HARBOUR.

Alterations in leading beacons.

The British Admiralty has given notice (No. 125 of 1898) that the leading beacons on North head, Kaipara Harbour, were then being taken down; the two upper (north-eastern) beacons would be re-creeted about one mile westward of their previous positions, and the lower (previous south-western) beacon would be discontinued.

Approximate new position, rear beacon, lat. 36° 22′ 15″ S., long. 174° 6′ 55″ E.

Nors.—Further notice will be given when the beacons have been re-erected; in the meantime Kaipara Harbour should be entered with great caution, and particular attention should be paid to any signals made from the station near the light-house.

P. J. FALLE, Comde., R.I.M. Port Officer of Calcutta.

Published for general information.

OALCUTTA, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 87.

[First Publication.]

NEW ZEALAND-Cook STRAIT.

Port Nicholson-Inlended fog signal on Pencarrow Head.

The British Admiralty has given notice (No. 126 of 1898) that a fog signal apparatus in course of erection in a position 384 feet, S. W., from Pencarrow head light-house, and at an elevation of 145 feet above the ses.

The fog signal will be explosive, and experiments may be made with it previous to its permanent establishment, of which last further notice will be given.

Approximate position, lat. 41° 21′ 40″ S., long. 174° 52″ E.

P. J. FALLE, Comdr., BI.M., Port Officer of Calcutta.

Published for general information.

CALGUETA, the 71A April 1698.

T. H. CLOWIS, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 88.

[First Publication.]

APRICA, EAST-RED SEA, WESTERN SHORE.

Massawa Harbour-Alterations in positions of Beraglio Island Lights.

THE British Admiralty has given notice (No. 127 of 1898) that the two red lights previously shown on either side of the base of the Palace central dome, Seraglio island, have been moved, so that they are now leading lights for entering Massawa Harbour:—

The front light is shown from a staff at the edge of the quay, at an elevation of 40 feet above the sea, in a position with the French Consulate bearing about 8.E. ‡ E., distant 2.6 cables; and north-east angle of Taoualoud Fort 8.W. ‡ 8.

Approximate position, lat. 15° 36′ 45" N., long. 39° 26′ 50" E.

2. The rear light is abown from the terrace at the morth-case angle of the Colemial palace, at an elevation of 72 feet above the sea, and in a position bearing 8. 67° W., distant 126 yards, from the front light.

Nors.—The above lights in line, bearing S. 67° W., lead into Massawa Harbour midway between the buoys at the entrance.

(Variation & Westerly in 1898.)

P. J. Falls, Comdr., B.I.M., Port Officer of Calcutta,

Published for general information.

CALOUTTA, the 7th April 1898.

T. H. CLOWES, Under-Beerstary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 89.

(First Publication.)

EASTERN ARCHIPPLAGO -- BORNEO, SOUTH COAST.

Amended depth on shoal southward of Melataor Point.

THE British Admiralty has given notice (No. 138 of 1898) that a depth of 14 feet, at low water springs, has been found on the shoal, previously marked 3 fathoms on the Chart, situated in a position hearing S. 9° E., distant 20 miles, from Melataor (Melatayor) Point.

Approximate position, lat. 3° 46' S., long. 114° 38' E

(Variation 8º Easterly in 1898.)

P. J. FALLE, Comdr., B.I.M., Port Officer of Calcusto.

Published for general information.

CALCULTA, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 90. [First Publication.]

OHINA SEA-GULF OF STAM. Light on Koh Chuen exhibited,

With reference to Notice to Mariners No. 110, dated 28th May 1897, issued by this office, the British Admiralty has given further notice (No. 134 of 1898) that further information has been received that a light is exhibited from the light-house recently erected near the summit of Koh Chuen, eastern side of the head of the Gulf of Siam :-

Koh Chuen light is a second order, group-flushing white light with a period of twenty seconds, thus:—flash, one and a half escends; celipse, three and a half seconds; flash, one and a half seconds; celipse, thirteen and a half seconds; it is elevated 466 feet above the sea, and visible from a distance of 29 miles in clear weather. In addition to the main light, a subsidiary fixed red light is shown over Him Chelen the real to the centh. over Hin Chalan, the rock to the southward.

The light-house is coloured white.

Approximate position, lat. 12° 31′ 10° N., long. 100° 56′ 10° E.

P. J. FALLE, Comdr., a.l.M., Port Officer of Calcutte.

Published for general information.

T. H. OLOWBS, Under-Secretary, Marine Departmen

GALCUTEL, the 7th April 1898.

NOTICE TO MARINERS-No. 21.

[First Publication,]

INDIA, SOUTH-CHYLON, SOUTH COAST. Hell Buoy at the eastern entrance to Galle Harbour shifted.

The Master attendant at Gallo has given notice, dated 12th February 1898, that the Bell Buoy marking the Cadda Rocks at the eastern entrance to Galle Harbour, will, on April Bell Buoy marking the Cadda Rocks at the eastern entrance to Galle Harbour, will, on April 15th next, be shifted due south of its present position as charted, a distance of one and half cables, end moored in 124 fathoms, distant 203 fathoms by measurement from the outer Cadda Rock in a south half east direction. Commanders of steamers approaching the Port are requested to note this and keep a position clear of the buoy until the Pilot shows his flag (white, red and white) horizontal, when it is safe to steer for the Pilot's cance. If under sail, the cance is distinguishable by the letter P on it, with the Pilot flag displayed above; should the buoy be out of position, the usual signels from the flag-staff will be hoisted to that effect.

P. J. FALLE, Comdr., Ed.M., Port Officer of Calcutta.

Published for giveral information.

T. H. OLOWES, Under Becrelary, Harine Department,

Capoutra, the 7th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 88.

[Second Publication.]

AFRICA, EAST COAST-ZANZIBAR AND PEMBA ISLANDS.

(1) Zanzibar island-Information on certain lights.

Tuz following Notice to Mariners (No. 122 of 1898) issued by the British Admiralty is

The undermentioned information, relative to certain lights in Zanzibar, has been received from the Port Officer, dated 19th January 1898 :-

- (a) A lighthouse is in course of erection on the west side of Chumbe, in approximate-ly lat. 6° 16′ 45″ S., long. 89° 10′ 35″ E.
- (b) Two red lights are shown at the landing-place at Zanzibar about a cable southeastward of Ras Shangani, and two green lights at the landing-place about a cable north-eastward of Ras Shangani.

Approximate position, Ras Shangani, lat. 6° 9' 45" S., long. 39° 11' 5" E.

- (c) The word "unreliable" written against Mungopam light, in approximately lat. 5° 57′ 10″ S., long. 39° 10′ 50° E., has been expunged from the Charte. This light is elevated 113 feet above high water. The lighthouse is 73 feet in height.
- (d) Mwana Mwana light, in approximately lat. 5° 45′ 10° B., long. 39° 18′ 10″ E., is elevated 115 feet above high water.
- (a) Ras Nungwe light, in approximately lat. 5° 48′ 5° S., long. 39° 18′ 5° E., has been altered from a revolving to a fixed light, is elevated 105 feet above high water (as before), and visible in clear weather from a distance of 12 miles. The lighthouse is 45 feet in height.
 - (2) Pemba teland-Flogetaffe in Chaki Chaki bay.

Also, that the undermentioned flagstaffs have been erected in Chaki Chakirbay :---

- (c) On the west side of Mesale island, in approximately lat: 5° 14' 25° S., long. 30°
- (b) On the east side of Res Tundatum, in approximately lat. 5° 15′ 20° S., long. 39° 41′ 20″ E.

P. J. FALLE, Comdr., B.I.M., Port Officer of Oaloutia.

Pablished for general information.

T. H. CLOWBS. Under-Secretary, Marine Department.

Calculate, the 1st April 1898.

NOTICE TO MARINERS-No. 84.

[Second Publication.]

PERSIAN GULF-SHATT-AL-ARAB OR BASRA RIVER.

A dangerous shoal.

The Officer in charge of the Marine Survey of India has given notice that information has been received from Lieutenant Kendall, R. I. M., Commanding R. I. M. S. Laurener, that a very dangerous shoul, varying in depth, forms in the Shatt-al-Arab or Basra river about 54 cables to the southward of Muhammera Paluce below the junction of the Karma and Shatt-al-Arab rivers: Approximate position lat, 30° 22′ 15″ N., long, 48° 12′ 35″ E. It is at its worst when the rivers Dis and Karma are in flood, independent of the rivers Tigris and Eaphrates, and being much modified when these rivers are in flood simultaneously; and barely perceptible when the Euphrates and Tigris are in flood first. It is generally expected about the month of February. The least depth of water at L. W. S. found in February 1898 was 4 feet. The deepest water at that time was between the shoal and Dabba island, by keeping close to the island the least water a vessel would pass over was then 9 feet at L. W. S.

Chart offected :- No. 1235 and Persian Gulf Pilot, 1890, page 295.

P. J. FALLE, Comdr., B.I.H., Port Officer of Caloutia,

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

CALOUTTA, the 1st April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTION TO MARINERS-No. 85.

[Second Publication.]

BAY OF BENGAL-ANDAMAN AND NICOBAR ISLANDS.

Position of certain shouls.

THE Officer in charge of the Marine Survey of India has given notice of the existence of the following shoals -

No. 1.—A shoal east of 2 fathoms at L. W. springs has been obtained by R. I. M. S. Nancoury on the Livermore shoul in the following position:-

Lat. 15° 12′ 15° N., long. 97° 40′ 39° E. with—

... N. 45° E. ... N. 89° E. ... 8. 23° E. Phalein Hill (1610) bearing Summit of Stog island Summit of Pig island

No. 2.—A sheal of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 15° 04½° N., long. 97° 36° E. with—

The summit of Pig island bearing
Phalein Hill (1610)
Konnangi S. Peak ... S. 84° B. ... N. 38° E. ... S. 65° E.

No. S.—A shoal of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 14° 53′ N., long. 97° 204′ E., with Kennangi (2580) S. Peak bearing N. 81° E., distant 303 miles.

As none of these shoals have been minutely examined, it is possible less water may exist on them.

All bearings are true.

Charle affected .- Nos. 1272, 823, 830, 70, Sailing Directions, Bay of Bengal Pilot second edition 1892, page 362.

P. J. FALLE, Condr., B.I.M., Port Officer of Calculis.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOT TTA, the 1st April 1898.

NOTICE TO MARINERS-No. 77.

[Third Publication.]

AUSTRALIA, INNER ROUTE-MOURLITAN HARBOUR.

Light on the southern North Harnard island.

The British Admiralty has given notice (No. 100 of 1898) that a light is exhibited from a lighthouse recently erected on the southern North Barnard island, southern approach to

North Barnard Island light is a sixth over, group-flashing white light, showing two flashes every ten seconds; elevated 292 feet above high water, and visible approximately from N. ‡ E., through north and west, to S.E. ‡ E., a distance of 16

The lighthouse, 10 feet high, is a cylindrical lantern standing on a concrete base,

Approximate position on chart No. 2849, lat. 17° 40' 50" S., long. 146° 11' 0" E.

Should the flashing apparatus fail to work at any time, a fixed light, of small power, will be exhibited.

(Variation 8° Rasterly in 1898.)

B. P. CREAGH, Comdr., E.I.M., Port Officer of Valentte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALUDTEA, the 26th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 78.

[Third Publication.]

CHINA SEA-HAINAN STRAIT.

South channel-Alteration in position of Hainan head bank buoy.

The British Admiralty has given notice (No. 101 of 1898) that, in consequence of the extension of Hainan head bank to the south-westward, Hainan head bank buoy has been moved about 2 cables, W.S.W., from its previous position; and is now moored in a depth of fathoms at low water springs, in a position with Hainan bluff summit (173) bearing S.W. W., W., distant 14 miles; and sand-bill (100) south.

Approximate position, lat. 20° 9′ 55" N., long. 110° 42' 10° E.

(Variation 2º Easterly in 1898.)

B. P. CREACH, Comdr., R.L.M., Port Officer of Calcutta.

Published for general information,

Oalcurra, the 26th March 1898.

T. H. CLOWES. Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 79.

[Third Publication.

AFRICA, EAST COAST-DELACOA BAY.

Lighthouse building northward of Cockburn shoal.

The British Admiralty has given notice (No. 104 of 1898) that information has been received from Lieutenant and Commander J. W. Pochin, H.M.S. Thrush, dated 15th January 1898, that works are in progress for the purpose of areoting a lighthouse northward of Cockburn shoal, in a position with Giblon point beacon bearing S. 23° W., distant 475 miles and cape Inyack lighthouse S. 21° E.

Approximate position, lat. 25° 58' 20* S., long. 82° 54' 10" E.

(Variation 25° Westerly in 1898.)

B. P. CREAGH, Comdr., B.I.M., Port Officer of Calcutta,

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

OALGUTTA, the 26th March 1898.

NOTICE TO MARLERRS-No. 80.

[Third Publication.] JAPAN-SETO UCHI.

(1) Shoal south-eastward of Sei sima.

The British Admiralty has given notice (No. 109 of 1898) that the Master of the steam-vessel Naramaru reports the existence of a sandy shoal, about a cable in length east and weet, with a depth of 22 fathoms on it at low water springs and 4 to 7 fathoms around, situated in a position with Sei sima summit (360) bearing N.W., distant 5 cables; and Tako saki summit (390) S.W.

Approximate position, lat. 84° 21′ 0° N., long. 183° 51′ 20° E.

(2) Shoal north-westward of Tadoteu.

Also, of the existence of a shoal, with a depth of 3 fathoms on it at low water springs, extending about 2 cables north-west and south-east, situated in a position with the lantern at Tadotau bearing S.E. \ S., distant 9 cables; and Kigasa sima summit (230) S.W. \ W.

Approximate position, lat. 84° 17' 10° N., long. 135° 43' 85° E.

(Variation 4º Westerly in 1898.)

B. P. CREAGH, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowss, Under-Recretary, Marine Department.

CALGUTTA, the 26th March 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 81.

[Third Publication.]

JAVA, EAST COAST-BANJUWARGI BOAD.

Bristence of a sunken rock.

The British Admiralty has given notice (No. 111 of 1898) of the existence of a rock, with a depth of 31 fathous on it at low water springs, situated southward of Depthford rocks in a position with Banjuwangi lighthouse bearing S. W. 2 W., distant 3 cables.

Approximate position, lat. 8° 12' 80" S., long. 114° 22' 55" E.

(Variation # Easterly in 1898.)

B. P. CREAGH, Complex, R.I.M., Port Officer of Calculta.

Published for general information.

CALCUTTA, the 26th March 1898,

T. H. Clowss, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 82.

[Third Publication.]

NEW ZEALAND-STOWART ISLAND.

(1) Patersen inlet-Sunken rock southward of Kaipipi bay.

The British Admiralty has given notice (No. 112 of 1898) of the existence of a pinnacle rock, with a depth of \$\frac{1}{2}\$ fathoms on it at low water, and deep water around, situated \$\frac{1}{2}\$ cables eastward of the south entrance point of Kaipipi bay.

The 5-fathom line round the shore has been extended outside this rock.

Approximate position on plan No. 2541, lat. 46° 55′ 10° S,, long. 168° 5′ 15° E.

Also, of the existence of a rock of small extent, with a depth of S feet on it at low water, situated a third of a mile from the south-east side of Codfish island, in a position with High rock bearing N. E. by N., distant I mile.

Approximate position on chart No. 2558, lat. 46° 48′ 10° 8., long. 167° 42′ E. (Variation 17° Kasterly in 1898.)

B. P. CREAGE, Comdr., 2.I.M.,
Port Officer of Calculia.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

OALOUTTA, the 26th March 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, APRIL 20, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 98,

[First Publication.]

AUSTRALIA-EAST COAST.

(1) Cleveland Bay-Light near quarantine station jetty. The British Admiralty has given notice (No. 136 of 1898) that a fixed white light of small power, visible between the bearings of N. 73° E. (over No. 2, black buoy) and N. 34° E. (over black, cage buoy), is shown from a platform, situated near the quarantine station jetty. on the west side of Magnetic island.

Approximate position, lat. 19° 8' 15° S., long. 146° 47' 5" E.

(2) Prince of Wales Channel-Beacon on Ipili Reef blown down.

Also, that the beacon on Ipili reef, northward of the east end of Goode island, has been blown down. It would be re-created as soon as possible, of which further Notice will be

Approximate position, lat. 10° 32% 0° S., long. 142° 10' 15° E.

(Variation ?" Rusterly in 1898.)

P. J. FALLE, Comde., R.I.M., Port Officer of Unioutta.

Published for general information.

T. H. CLOWNS Under-Secretary, Marine Department.

Calcorna, the 18th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 98.

[First Publication.] JAPAN-KIUSIU.

Karalen no ura-Sunken rocks.

The British Admiralty has given notice (No. 187 of 1898) of the existence of the undermentioned sunken rooks, in the north-eastern part of Karatsu no urs, northern coast of Kinsin

1. A rock, named Tsutan se, with a depth of 3 fathoms on it, situated with the west extreme of Keya saki bearing N. by W. & W., distant 2 miles; and Ko Fusi yama (1267) N. E. by E. 4 E. Approximate position, lat. 33° 32° 50° N., long. 130° 6′ 0″ R.

2. A rook, with a depth of 5 fathoms on it, situated in a position bearing S. E. distant 111 cables from rook (1); or with Keya saki bearing N. N. W. W., distant 8 2 miles.

Rocks above and below water extend about 8 cables southward of the point projection from the middle of the north shore of Funage abi.

(Variation 4º Westerly in 1898.)

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 16th April 1898.

T. H. Clowes, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 94.

[First Publication.]

PERSUAN GULF, WESTERN SHORE-BAHREIN HARBOUR.

Amended depth on shoul to the north-eastward.

THE British Admiralty has given notice (No. 138 of 1898) that information has been received from the Commander of the R.I.M. steam-vessel Lawrence, dated 9th February 1898, that he obtained coundings of 4½ and 4½ fathoms, on the shoel hitherto marked with 5-fathom depths on the Chart, situated in a position bearing N.N.E. & E., distant 22 miles, from the northern point of Muharrak island eastern side of Bahrein harbour.

Approximate position, lat. 26° 87' N., long. 50° 50' E.

The words "Depths of 41 and 42 fathoms reported on this shoal" have been written on the Chart against the above shoal. (Variation nil in 1898.)

P. J. FALLE, Comde., R.I.N., Port Officer of Calcutta,

Published for general information.

CALCUTTA, the 16th April 1898.

T. H. CLOWBS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 95.

[First Publication.]

EASTERN ARCHIPELAGO .- JAVA, NORTH COAST.

Batavia approach—Sunken rock south-eastward of Rotterdam island.

THE British Admiralty has given notice (No. 139 of 1898) of the existence of a rechabout three-quarters of a cable in extent, with a depth of 2 fathoms on it, and 0 fathoms near, situated with the south extreme of Rotterdam island bearing N. 71° W., distant 31 cables.

Approximate position, lat. 6° 0′ 10" S., long. 106° 44′ 50" E.

(Variation 1º Rasterly in 1898.)

P. J. FALLE, Comdr., R.LW., Port Officer of Calcutta.

Published for general information.
T. H. OLOWES,

CALCUTTA, the 18th April 1898. .

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 96.

[First Publication.]

AFRICA, RAST-RED SEA, WESTERN SHORE

Shab Shakhe buoy missing.

The British Admiralty has given notice (No. 140 of 1898) that information has been received from Lieutenaut and Commander H. J. Gedge, H.M. surveying vessel Stork, that, on passing the spit extending off Shab Shakhe, on 31st January 1898, the buoy (conical, red) previously marking the extremity of the spit was not in position, nor could it be seen either northward or southward of the locality.

Approximate position, extremity of spit; lat. 14° 411' N., long. 41° 6' R.

P. J. FALLE, Comdr., R.I.K., Port Officer of Calcutte.

Published for general information.

DALOUTTA, the 18th April 1898.

T. H. CLOWIS, Under-Secretary, Marine Department

NOTICE TO MARINERS-No. 97.

[First Publication.]

AFRICA, EAST COAST-DELAGOA BAY.

Gibbon point beacon fallen down.

THE British Admiralty has given notice (No. 141 of 1898) that Gibbon point beacon bas fallen down, and a new beacon would be erected there.

Approximate position, lat. 25° 58' 5" S., long. 32° 54' 10" E.

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowes, Under-Secretary, Marine Department.

Calcutts, the 18th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 98.

[First Publication.] SOUTH PACIFIC OCEAN.

Particulars of certain banks.

The British Admiralty has given notice (No. 145 of 1898) that the undermentioned particulars of certain banks in the South Pacific Ocean are derived from recent examinations by Captain A. Mostyn Field, H.M. surveying vessel Penguin:—

(1) Lalla Rookh Bank, originally discovered and sounded on by Sir Edward Home, H.M.S. North Star, is 31 miles long north-east and south-weet, with an extreme breadth of 11 miles.

The north-east end of the bank is in approximately lat. 12° 54′ 30° 8., long. 175° 38′ W., with general depths of 10 to 14 fathoms on it, over

The central portion of the bank is slightly deeper than the rim, but not very markedly so. From the edge the soundings drop down steeply to depths between 200 and 300 fathoms.

Whilst at anchor on this bank (October 1897) the current was found to set between W.N.W. and S.S.E., from a half to one and a quarter knots.

The southerly set was most pronounced between 3h, and 8h, after high water at Wallis island.

(2) Home Knoll, named after Captain Sir Edward Home, was found by H.M.S. Penguin while searching for Lella Rookh bank.

It is a small coral knoll, extending east and west about one mile between the 100-fathom limits, by little more than half a mile in breadth, with a least depth of 10 fathoms on it, and general depths of 12 to 18

fathoms, over a sand and coral bottom.

Its centre is in approximately lat. 12° 548′ S., long. 175° 364′ W., and it is situated one mile eastward from the north-east end of Lalla Rookh bank with soundings of from 200 to 300 fathoms between.

The 1,000-fathom line encircles the two banks, Lalla Rookh and Home

knoll, at distances varying from 1, to 3 miles.

(3) Pasco Bank, reported by several vessels as situated between Savaii and Wallis islands, and marked "7 P. D." on the Admiralty Charts, is 5 miles in width at its eastern end, from whence it extends nearly 20 miles in a westerly direction. tion, narrowing to a width of 3 miles in its centre, westward of which it contracts to a breadth of three-quarters of a mile, thence broadening out and forming a narrow ridge.

The general depths in the centre are from 22 to 27 fathoms, sand and coral, with a shallow rim of growing coral running round its outer margin, having depths of 8 to 10 fathoms on it. The shoulest soundings, 71 fathoms, were found on the southern edge of the bank, where it is most contracted in width. On all sides it drops down steeply into depths of from 200 to 400 fathoms.

The western extreme of this bank is situated in approximately lat. 13° 4° 18., long. 174° 374′ W.

Whilst at anchor on this bank (October 1897) the current was found to set from N.W. to S.W. from a balf to one and a quarter knots.

(4) FIELD BANK, probably identical with a bank reported in 1874 by Captain Turpie of the Missionary barque John Williams, was examined by H.M.S. Penguin in October 1897, and as there is already a Turpie bank in this vicinity, the name of Field has been given to it.

Its eastern extremity is situated in approximately lat. 12° 162′ 8., long. 174° 434′ W., and the bank thence extends W. by S. ½ 8. for 6½ miles, with a breadth of 2½ miles towards the centre, and contracted at the eastern end to a narrow ridge, which is 2 miles long and barely half a mile in width.

The least water found was 13 fathoms, situated on its northern edge; the general depths over the shallow rim encircling the bank range from 14 to 16 fathoms, and the depths in the centre from 18 to 21 fathoms, over a sand and coral bottom.

The edge of the bank drops steeply on all sides into depths of from 200 to 300 fathoms.

It lies S.W. by S., distant 14 miles, from Tavuni bank, with soundings of upwards of 1,200 fathome between.

The sheal to which the name Turpie was attached having been previously shown 50 miles northward of this position on the Admiralty Chart, a search was made by the *Penguin* over a considerable area in that locality, but no sign of shoal water was found there. It has therefore been expunged.

(5) TAYIUMI BANK, originally reported by the schooner of that name, is a small oral-shaped bank of sand and coral, 2 miles long. E. & N. and W. & S., within the 100-fathom limits, and upwards of a mile broad.

Its centre is situated in lat. 12° 6′ S., long. 174° 34½′ W. The least water found by H.M.S. Penguin was 9 fathoms, the depth over the greater portion of the bank ranging from 11 to 14 fathoms.

Outside the 20-fathom line it drops steeply down to depths of over 100 fathoms.

fathoms, the 1,000-fathom line maintaining a distance of 2 miles from it all round.

Whilst at anchor on this bank (September 1897) the current was setting N.W., half m knot.

(6) Robbis Bank, originally reported by the Master of the schooner Tavium in 1888, is nearly circular in shape, 8 miles in diameter, and situated with its centre in approximately lat. 11° 3′ S., long. 176° 53′ W.

It is composed of sand and coral, and is of the usual stoll-like formation, which is such a common feature in all these banks, having general depths of 26 to 29 fathoms over its central portion, with a shallower rim, running round the edge, of growing coral, about one mile in within the 20-fathom ine, with depths of 10 to 15 fathoms over it.

The shallowest part is on the north-western edge where this rim rises to depths of 7 and 8 fathoms for a distance of about 2 miles slong its

periphery.

The edge of this bank drops down steeply on all sides, within a very short distance, to depths of from 200 to 300 fathoms.

Whilst at anchor on this bank (November 1897) the current varied considerably. East and S. E. currents, from a half to three-quarters of a knot, coessionally setting to windward against a fresh E.N.E. wind.

(7) ADOLPH EXOLL, originally reported by the German schooner Adolph, is a small coral bank, one mile in extent, rising steeply from depths of 300 to 400 fathoms, with a least depth of 10 fathoms on it on its western side.

Its centre is situated in approximately lat. 11° 54½′ S., long. 178° ½′ W. and it bears S.E., distant 3 miles, from Tuscarora bank, with soundings of from 300 to 400 fathoms between.

(8) Turcarora bank, discovered by H.M.S. Penguin, is situated with its centre in approximately lat. 11° 48% S., long. 178° 14' W-

It is 10 miles long, east and west, and about 6 miles broad, having depths of 26 to 29 fathoms, and and coral, over its central portions, with a shallower rim of growing coral, over which the general depths are 20 to

On the south-western edge there is a shallower patch of 14 fathoms, and on the northern edge a patch of 16 to 18 fathoms. The bank drops down steeply on all sides into depths of more than 200 fathoms. Whilst at anchor on this bank (November 1897) the current varied in direction between W.N.W. and South, with a rate of from a quarter to one knot. The southerly current commenced with great regularity each day 3 hours after the moon's passage and continued for 6 hours, showing that these variations are due to tide.

Both the Adolph knoll and the Tuscarora bank appear to stand on an extensive deep bank, the 1,000-fathom limit of which it was not practicable to determine.

Note.—Captain Field remarks that in no single instance was the presence of any of these banks detected from the masthead, although the conditions for doing so were usually favourable, and in addition to the ordinary "look out," Fijian, familiar with the appearance

Charts Nos. 780, 1829 and 1830 have been cancelled.

P. J. FALLE, Condr., R.LM., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

OALOUTTA, the 16th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 99.

(First Publication.)

PACIFIC OCEAN-PHILIPPINES-LUZON ISLAND.

Port Kavite-Light on Sangley point.

The British Admiralty has given notice (No. 147 of 1898) that a light is exhibited provisionally from the old, iron framework lighthouse on Sangley point:—

Sangley point light is a cata-dioptric, fixed red light, elevated 34 feet above high water, 28 feet above the ground, and visible from N. 89° E., through east and south, to N. 31° W. (an arc of 240), a distance of 8 miles in clear weather.

Approximate position on plan No. 975, lat. 14° 29′ 50° N., long, 120° 54′ 40° E.

Note.—Sangley point is extending to the eastward, and the above light is eventually to be shifted nearer to the extremity of the point. Further Notice will be given when this change is carried out.

(Variation 1º Basterly in 1898.)

P. J. Falle, Condr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 16th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 86. [Second Publication.]

NEW ZEALAND-NORTH ISLAND, KAIPARA HARBOUR.

Alterations in leading beacons.

THE British Admiralty has given notice (No. 125 of 1898) that the leading beacons on North head, Kaipara Harbour, were then being taken down; the two upper (north-eastern) beacons would be re-creeted about one mile westward of their previous positions, and the lower (previous south-western) beacon would be discontinued.

Approximate new position, rear beacon, lat. 86° 22' 15" S., long. 174° 6' 55" E.

Nors.—Further notice will be given when the beacons have been re-crected; in the meantime Kaipara Harbour should be entered with great caution, and particular attention should be paid to any signals made from the station near the light-house.

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 7th April 1898.

NOTICE TO MARINERS-No. 87.

[Second Publication.] NEW ZEALAND-Cook STRAIT.

Port Nicholson-Intended fog signal on Pencarrow Hoad.

The British Admiralty has given notice (No. 126 of 1898) that a fog signal apparatus is in course of erection in a position 384 feet, S. W., from Pencarrow head light-house, and at an elevation of 145 feet above the sea.

The fog signal will be explosive, and experiments may be made with it previous to its permanent establishment, of which last further notice will be given.

Approximate position, lat. 41° 21′ 40° 8., long. 174° 52′ E.

P. J. FALLE, Comdr., RI.M., Port Officer of Calcutta.

Published for general information.

CALGUTTA, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 88.

[Second Publication.]

AFRICA, EAST-Red Sea, Western Shore.

Massawa Harbour-Alterations in positions of Scraglio Island Lights.

THE British Admiralty has given notice (No. 127 of 1898) that the two red lights previously shown on either side of the base of the Palace central dome, Scraglio island, have been moved, so that they are now leading lights for entering Massawa Harbour:-

The front light is shown from a staff at the edge of the quay, at an elevation of 40 feet above the sea, in a position with the French Consulate bearing about S.E. ‡ E., distant 2,0 cables; and north-east angle of Taoualoud Fort S.W. § S.

Approximate position, lat. 15° 36′ 45" N., long. 39° 26′ 50" E.

2. The rear light is shown from the terrace at the north-east angle of the Colonial paluce, at an elevation of 72 feet above the sea, and in a position bearing 8. 67° W., distant 126 yards, from the front light.

The above lights in line, bearing S. 67° W., lead into Messawa Harbour midway between the buoys at the entrance.

(Variation 4° Westerly in 1898.)

P. J. Falle, Condr., B.I.M., Port Officer of Calcutte.

Published for general information.

CALCUTTA, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 89.

[Second Publication.]

EASTERN ARCHIPELAGO-Borneo, South Coast.

Amended depth on shoal southward of Melataor Point.

THE British Admiralty has given notice (No. 133 of 1898) that a depth of 14 feet, at low water springs, has been found on the shoal, previously marked 3 fathoms on the Chart, situated in a position bearing S. 9° E., distant 20 miles, from Melataur (Melatayor) Point.

Approximate position, lat. 3° 48' S., long. 114° 38' E.

(Variation 2º Easterly in 1898.)

P. J. FALLB, Comdr., B.I.M., Port Officer of Calculta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUITA, the 7th April 1898.

NOTICE TO MARINERS-No. 90.

[Second Publication.] CHINA SEA-GULF OF STAM.

Light on Koh Chuen exhibited.

With reference to Notice to Mariners No. 110, dated 28th May 1897, issued by this office, the British Admiralty has given further notice (No. 134 of 1898) that further information has been received that a light is exhibited from the light-house recently created near the summit of Koh Chuen, eastern side of the head of the Gulf of Siam:—

Koh Chuen light is a second order, group flashing white light with a period of twenty seconds, thus:—flash, one and a half seconds; eclipse, three and a half seconds; flash, one and a half seconds; eclipse, thirtren and a half seconds; it is elevated 466 feet above the sea, and visible from a distance of 29 miles in clear wenther. In addition to the main light, a subsidiary fixed red light is shown over Hin Chalan, the rock to the southward. The light-house is coloured white.

Approximate position, lat. 12° 31′ 10" N., long. 100° 56′ 10" E.

P. J. FALLE, Comdr., M.I.M., Port Officer of Caloutta.

Published for general information.

CALCUTTA, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 91,

[Second Publication.]

INDIA, SOUTH-CEYLON, SOUTH COAST.

Bell Buoy at the eastern entrance to Galle Harbour shifted.

The Master attendant at Galle has given notice, dated 12th February 1898, that the Bell Buoy marking the Cadda Rocks at the eastern entrance to Galle Harbour, will, on April 15th next, be shifted due south of its present position as charted, a distance of one and half cables, and moored in 12½ fathoms, distant 233 fathoms by measurement from the outer Cadda Rock in a south half oast direction. Commanders of steamers approaching the Port are requested to note this and keep a position clear of the buoy unt. I the Pilot shows his flag (white, and and white) horizontal, when it is safe to steer for the Pilot's cance. If under sail, (white, red and white) horizontal, when it is safe to steer for the Pilot's cance. If under sail, the cance is distinguishable by the letter P on it, with the Pilot flag displayed above; should the buoy be out of position, the usual signels from the slag-staff will be hoisted to that effect.

P. J. FALLE, Comde., R.L.M., Port Officer of Calcutta,

Published for general information,

Calourra, the 7th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 88.

[Third Publication.]

AFRICA, EAST COAST-ZANZIBAR AND PEMBA ISLANDS.

(1) Zanzibar island-Information on certain lights. THE following Notice to Mariners (No. 122 of 1898) issued by the British Admiralty is republished : -

The undermentioned information, relative to cortain lights in Zanzibar, has been received from the Port Officer, dated 19th January 1898 :-

(a) A lighthouse is in course of erection on the west side of Chumbe, in approximately lat. 6° 16′ 45″ S., long. 39° 10′ 35″ E.
(b) Two red lights are shown at the landing-place at Zanzibar about a cable southeastward of Ras Shangani, and two green lights at the landing-place about a cable north-eastward of Ras Shangani.

Approximate position, Ras Shangani, lat. 6° 9' 45" S., long. 89° 11' 5" E.

- (c) The word "unreliable" written against Mungopani light, in approximately lat. 5° 57′ 10° S., long. 39° 10′ 50° E., has been expunged from the Charts. This light is elevated 113 feet above high water. The lighthouse is 73 feet in height.
- (d) Mwana Mwana light, in approximately lat. 5° 45′ 10° S., long. 89° 18′ 10″ E., is elevated 115 feet above high water.

 (e) Ras Nungwe light, in approximately lat. 5° 43′ 5″ S., long. 39° 18′ 5″ E., has been altered from a revolving to a fixed light, is elevated 105 feet above high water (as before), and visible in clear weather from a distance of 12 miles. The lighthouse is 45 feet in height.

(2) Pemba island-Flagetaffe in Chaki Chaki bay.

Also, that the undermentioned flagstaffs have been erected in Chaki Chaki bay :-

(c) On the west side of Mesale island, in approximately lat. 5° 14' 25" S., long, 390 35' 55* E.

(b) On the east side of Ras Tundauwa, in approximately lat. 5° 15′ 20° S., long. 80° 41′ 20° E.

F. J. FALLE, Comdr., B.I. M., Port Officer of Calculta,

Published for general information.

Cancurra, the 1st April 1898.

T. H. CLOWNS, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEFARTMENT.

NOTICE TO MARINERS-No. 84. [Third Publication.]

PERSIAN GULF-SHATT-AL-ARAB OR BASEA RIVER.

A dangerous shoal.

The Officer in charge of the Marine Survey of India has given notice that information has been received from Lieutenant Kendall, R. I. M., Commanding R. I. M. S. Laurenee, that a very dangerous shoal, varying in depth, forms in the Shatt-al-Arab or Bears river about 5½ cables to the southward of Muhammera Palace below the junction of the Karun and Shatt-al-Arab rivers: Approximate position lat. 30° 22′ 15″ N., long. 48° 12′ 35″ R. It is at its worst when the rivers Dis and Karun are in flood, independent of the rivers Tigris and Euphrates, and being much modified when these rivers are in flood simultaneously; and barely perceptible when the Euphrates and Tigris are in flood first. It is generally expected about the month of February. The least depth of water at L. W. S. found in February 1898 was 4 feet. The deepest water at that time was between the shoal and Dabha island, by keeping close to the island the least water a vessel would pass over was Dabba island, by keeping close to the island the least water a vessel would pass over was then 9 feet at L. W. S.

Chart affected :- No. 1235 and Persian Gulf Pilot, 1890, page 295.

P. J. FALLE, Comdr., B.L.M., Port Officer of Calcutta.

Published for general information.
T. H. Clowes,

CALGUTTA, the 1st April 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 86. [Third Publication.]

BAY OF BENGAL-ANDAMAN AND NICOBAR ISLANDS.

Position of certain shoals.

THE Officer in charge of the Marine Survey of India has given notice of the existence of the following shoals:

No. 1 .- A shoal east of 2 fathoms at L. W. springs has been obtained by R. I. M. S. Nancoury on the Livermore sheal in the following position:-

Lat. 15° 12′ 15° N., long. 97° 40′ 89° E. with-

... N. 45° E. ... N. 89° E. ... 8. 23° E. Phalein Hill (1610) bearing Summit of Stag island *** 444 Summit of Pig island 11 4 6 ...

No. 2.—A shoul of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 15° 041° N., long. 97° 36° E. with—

... S. 84° E. ... N. 38° E. The summit of Pig island bearing ... Phalein Hill (1610) Kennangi S. Peak ... N. 38° E. 4+4 444

No. 3.—A shoal of considerable extent has been discovered with 6 fathoms of water on it lying in lat. 14° 53′ N., long. 97° 204′ E., with Kennangi (2580) S. Peak bearing N. 81° E., distant 30½ miles.

As none of these shoals have been minutely examined, it is possible less water may exist on them.

All bearings are true.

Charts affected.—Nos. 1272, 823, 830, 70, Sailing Directions, Bay of Bengal Filot

P. J. FALLE, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALOUTTA, the 1st April 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, APRIL 27, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL, -MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 100.

[First Publication.] CHINA SEA-Hong-Kong.

Alterations in Storm Signale.

WITH reference to Notice to Mariners No. 178, dated 18th September 1897, issued by this Office, the British Admiralty has given further notice (No. 148 of 1898) that the Storm Signals given in the above Notice have been discontinued; and the former Storm Signals, as given at pages 78-79, China Sea Directory, Vol. III, 1894, have been re-established.

P. J. FALLE, Comdr., B.I.M., Port Officer of Colcutts.

Published for general information.

T. H. CLOWES Under-Secretary, Marine Department.

CALCUTTA, the 23rd April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 101.

[First Publication.]

PACIFIC OCEAN-SANDWICH ISLANDS-OAHU.

Honolulu approach—Intended light on Leahi (Diamond head).

The British Admiralty has given notice (No. 150 of 1898) that information has been received that a light will be exibited from a lighthouse to be erected on Leahi (Diamond Head). Head), eastern approach to Honolulu:-

Leahi (Diamond Head) light will be me third order, dioptric, fixed light with sectors; showing white over an arc of 184°, and read over two arcs of 13°, one on each side of the white sector; it will be elevated 147 feet above the sea and visible in clear weather from a distance of 20 minutes. distance of 20 miles.

The lighthouse, an open, frame-work tower, will be situated about 250 yards westward of the signal station.

Approximate position, lat. 21° 15′ 35° N., long. 157° 48′ 40° W.

P. J. FALLE, Comde., B.I.M., Port Officer of Calcutte.

Published for general information.

T. H. CLOWRS, Under-Secretary, Marine Department.

CALGUTTA, the 23rd April 1898.

NOTICE TO MARINERS-No. 102.

(First Publication.)

BAY OF BENGAL-BURNA COAST-GULF OF MARTABAN.

Exhibition of Amherst point light further postponed.

With reference to Notice to Mariners, No. 69, dated 12th March last, issued by this Office, a telegraphic communication has been received from the Port Officer, Rangoon, stating that the exhibition of Amherst point light has been further postponed to 6th June next.

P. J. FALLE, Comdr., a.l.M., Port Officer of Calcutta.

Published for general information.

T. H. Clowns, Under-Secretary, Marine Department.

CALGUTTA, the 28rd April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 93.

[Second Publication.]

AUSTRALIA-EAST COAST.

(1) Cleveland Bay-Light near quarantine station jetty.

The British Admiralty has given notice (No. 136 of 1898) that a fixed white light of small power, visible between the bearings of N. 73° E. (over No. 2, black buoy) and N. 34° E. (over black, cage buoy), is shown from a platform, situated near the quarantine station jetty, on the west side of Magnetic island.

Approximate position, lat. 19° 8′ 15° 8., long. 146° 47′ 5° E.

(2) Prince of Wales Channel-Bracon on Ipili Reef blown down.

Also, that the beacon on Ipili reef, northward of the east end of Goode island, has been blown down. It would be re-erected as soon as possible, of which further Notice will be given.

Approximate position, lat. 10° 32% 0° 8., long. 142° 10′ 15° E.

(Variation 74 Basterly in 1898.)

P. J. FALLE, Comdr., E.I.M.,

Fort Officer of Calcutta.

Published for general information.

T. H. Clowm, Under-Secretary, Marine Department.

UALUUTTA, the 16th April 1598.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 98.

[Second Publication.]

JAPAN-KIUSIU.

Karatsu no ura-Sunken rocks.

The British Admiralty has given notice (No. 137 of 1898) of the existence of the undermentioned sunken rocks, in the north-eastern part of Karaten no ura northern coast of Kiusiu:—

 A rook, named Tsutsu se, with a depth of 3 fethoms on it, situated with the west extreme of Keya saki bearing N. by W. § W., distant 2 miles; and Ko Fusi yama (1267) N. E. by E. § E.

Approximate position, lat. 33° 32′ 50° N., long. 130° 6′ 0° E.

2. A rock, with a depth of 5 fathoms on it, situated in a position bearing 8. E. \(\frac{1}{2} \) 8. \(\frac{1}{2} \) distant 11\(\frac{1}{2} \) cables from rock (1); or with Keya saki bearing N. N. W. \(\frac{1}{2} \) W., distant 8\(\frac{1}{2} \) miles.

Rocks above and below water extend about 3 cables southward of the point projecting from the middle of the north above of Funago shi.

(Variation 4º Westerly in 1898.)

P. J. FALLE, Comedr., B.I.M., Part Officer of Calcults.

Published for general information.

T. H. Clowel, Under-Swretary, Marine Department.

CALOUTTA, the 16th April 1898.

NOTICE TO MARINERS-No. 84.

(Second Publication.)

PERSIAN GULF, WESTERN SHORE-BAHREIN HARBOUR.

Amended depth on shoul to the north-eastward.

The British Admiralty has given notice (No. 138 of 1898) that information has been received from the Commander of the R.I.M. steam-vessel Laurence, dated 9th February 1898, that he obtained soundings of 44 and 45 fathoms, on the shoal hitherto marked with 5-fathom depths on the Chart, situated in a position bearing N.N.E. ½ E., distant 22 miles, from the northern point of Muharrak island eastern side of Bahrein harbour.

Approximate position, lat. 26° 37' N., long. 50° 50' E.

The words "Depths of 4; and 4; fathoms reported on this shoal" have been written on the Chart against the above shoal.

(Variation nil in 1898.)

P. J. Fallin, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 16th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 95.

[Second Publication.]

EASTERN ARCHIPELAGO-JAVA, NORTH COAST.

Batavia approach—Sunken rock south-eastward of Rotterdam island.

The British Admiralty has given notice (No. 139 of 1898) of the existence of a rock, about three-quarters of a cable in extent, with a depth of 2 fathoms on it, and 9 fathoms near, attends with the south extreme of Rotterdam island bearing N. 71° W., distant 3½ cables.

Approximate position, lat. 6° 0′ 10" S., long. 106° 44′ 50" E.

(Variation 1º Easterly in 1898.)

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutts.

Published for general information.

CALCUTTA, the 18th April 1898.

T. H. Clowes, . Under-Secretary, Marina Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 96.

[Second Publication.]

AFRICA, EAST—RED SEA, WESTERN SHORE.

Shab Shakhs buoy missing.

The British Admiralty has given notice (No. 140 of 1898) that information has been received from Lieutenant and Commander H. J. Gedge, H.M. surveying vessel Stork, that, on passing the spit extending off Shab Shakhs, on 31st January 1898, the buoy (conical, red) previously marking the extremity of the spit was not in position, nor could it be seen either northward or could be the locality. either northward or southward of the locality.

Approximate position, extremity of spit, lat. 14° 41% N., long. 41° 6' E.

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutta.

UALCOTTA, the 16th April 1898.

Published for general information.

T. H. CLOWES,

"Il 1898. Under-Secretary, Marine Department."

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 97.

[Second Publication.]

AFRICA, BAST COAST-DELAGOA BAY.

Tax British Admiralty has given notice (No. 141 of 1898) that Gibbon point beacen has fallen down, and a new beacon would be erected there.

Approximate position, lat. 25° 58′ 5″ 8., long. 32° 54′ 16″ E.

P. J. FALLE, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

Calcurra, the 18th April 1898.

T. H. CLOWSE, Under-Secretary, Marine Department.

, NOTICE TO MARINERS-No. 98.

(Second Publication.)

SOUTH PACIFIC OCEAN.

Particulars of certain banks.

The British Admiralty has given notice (No. 145 of 1898) that the undermentioned particulars of certain banks in the South Pacific Ocean are derived from recent examinations by Captain A. Mostyn Field, H.M. surveying vessel *Penguin*:—

(1) Lalla Rookh Bake, originally discovered and sounded on by Sir Edward Home, H.M.S. North Star, is 33 miles long north-east and south-west, with an extreme breadth of 13 miles.

The north-east end of the bank is in approximately lat. 12° 54′ 30° S., long. 175° 38′ W., with general depths of 10 to 14 fathous on it, over

a sand and coral bottom.

The central portion of the bank is slightly deeper than the rim, but provery markedly so. From the edge the soundings drop down steeply to depths between 200 and 300 fathoms.

Whilst at anohor on this bank (October 1897) the current was found to set between W.N.W. and S.S.E., from a half to one and a quarter knots. The southerly set was most pronounced between 3h, and 8h. after high water at Wallis island.

(2) Home Knoll, named after Captain Sir Edward Home, was found by H.M.S. Penguin while searching for Lalla Rookh bank.

It is a small coral knoll, extending east and west about one mile between the 100-fathom limits, by little more than half a mile in breadth, with a least depth of 10 fathoms on it, and general depths of 12 to 16

fathoms, over a sand and coral bottom.
Its centre is in approximately lat. 12° 54‡′ S., long. 175° 36‡′ W., and it is situated one mile eastward from the north-east end of Lalla Rooth bank with soundings of from 200 to 300 fathoms between

The 1,000-fathom line encircles the two banks, Laila Rookh and Home knoll, at distances varying from 1; to 3 miles.

(3) Pageo Bank, reported he several vessels as situated between Savaii and Wallis islands, and marked "7 P. D." on the Admiralty Charts, is 5 miles in width at its eastern end, from whence it extends nearly 20 miles in a westerly direction, narrowing to a width of 3 miles in its centre, westward of which it contracts to a breadth of three-quarters of a mile, thence broadening out and forming a narrow ridge.

The general depths in the centre are from 22 to 27 fathoms, sand and coral, with a shallow rim of growing coral running round its outer margin, having depths of 8 to 10 fathoms on it. The shoalest soundings, 7 fathoms, were found on the southern edge of the bank, where it is most contracted in width. On all sides it drops down steeply into depths of from 200 to 400 fathoms.

The western extreme of this bank is situated in approximately lat. 18° 4 S., long. 174° 37‡′ W. Whilst at anchor on this bank (October 1897) the current was found to set from N.W. to S.W. from a half to one and a quarter knots.

(4) Fire Bank, probably identical with a bank reported in 1874 by Captain Turple of the Missionary barque John Williams, was examined by H.M.S. Penguin in October 1897, and as there is already a Turple bank in this vicinity, the name of Field has been given to it.

Its eastern extremity is situated in approximately lat. 12° 16% 8, long. 174° 434′ W., and the bank thence extends W. by S. 1 S. for 61 miles with a breadth of 21 miles towards the centre, and contracted at the eastern end to a narrow ridge, which is 2 miles long and barely half mile in width.

The least water found was 13 fathoms, situated on its northern edge; the general depths over the shallow rim enciroling the bank range from 14 to 16 fathoms, and the depths in the centre from 18 to 21 fathoms, over

The edge of the bank drops steeply on all sides into depths of from 200 a sand and coral bottom.

to 300 fathoms. It lies S.W. by S., distant 14 miles, from Tavuni bank, with soundings of upwards of 1,200 fathoms between. The shoal to which the name Turpie was attached having been previously shown 50 miles northward of this posicion on the Admiralty shown 50 miles northward of this position on the Admiralty Chart, a search was made by the Penguin over a considerable area in that locality, but no sign of shoal water was found there. It has therefore been

(5) Tavium Bank, originally reported by the schooner of that name, is a small oval-shaped bank of sand and coral, 2 miles long, E. 1 N. and W. 2 S., within the 100-fathern limits, and upwards of a mile broad.

Its centre is situated in lat. 12° 6' S., long. 174° 841' W. The least vater found by H.M.S. Penguin was 9 fathoms, the depth over the greater

portion of the bank ranging from 11 to 14 fathoms.

Outside the 20-fathom line it drops steeply down to depths of over 100 fathoms, the 1,000-fathom line maintaining a distance of 2 miles from it

Whilst at anchor on this bank (September 1897) the current was setting N.W., half a knot.

(6) Robbit Bank, originally reported by the Master of the schooner Taviusi in 1888, is nearly circular in shape, 8 miles in diameter, and situated with its centre in approximately lat. 11° 3′ S., long. 176° 53′ W.

It is composed of sand and coral, and is of the usual stoll-like formation, which is such a common feature in all these banks, having general which is such a common reature in all these canes, having general depths of 26 to 29 fathoms over its central portion, with a shallower zim, running round the edge, of growing coral, about one mile in width within the 20 fathom line, with depths of 10 to 15 fathoms over it.

The shallowest part is on the north-western edge where this rim rises to depths of 7 and 8 fathoms for a distance of about 2 miles along its

periphery.

The edge of this bank drops down steeply on all sides, within a very short distance, to depths of from 200 to 300 fathoms.

Whilst at anohor on this bank (November 1897) the current varied considerably. East and S. E. currents, from a half to three-quarters of a knot, occasionally setting to windward against a fresh E.N.E. wind.

(7) ADDLPH ENGLL, originally reported by the German schooner Adolph, is a small coral bank, one mile in extent, rising steeply from depths of 300 to 400 fathoms, with a least depth of 16 fathoms on it on its western side.

Its centre is situated in approximately lat. 11° 54‡′ 8., long. 178° 9‡′ W. and it bears S.E., dietant 3 miles, from Tuscarora bank, with soundings of from 300 to 400 fathoms between.

(8) Tuscanoma Bank, discovered by H.M.S. Penguin, is situated with its centre in approximately lat. 11° 48‡′ S., long. 178° 14′ W.

It is 10 miles long, east and west, and about 6 miles broad, having depths of 26 to 29 fathoms, sand and coral, over its central portions, with a shallower rim of growing coral, over which the general depths are 20 to 22 fathoms.

On the south-western edge there is a shallower patch of 14 fathoms, and on the northern edge a patch of 16 to 18 fathoms. The bank drops down steeply on all sides into depths of more than 200 fathoms.

Whilst at anchor on this bank (November 1897) the current varied in direction between W.N.W. and South, with a rate of from a quarter to one knot. The southerly current commenced with great regularity each day 3 hours after the moon's passage and continued for 6 hours, showing that these variations are due to tide. showing that these variations are due to tide.

Both the Adolph knoll and the Tuscarora bank appear to stand on an extensive deep bank, the 1,000-fathom limit of which it was not practicable to determine.

Nors.—Captain Field remarks that in no single instance was the presence of any of these banks detected from the masthead, although the conditions for doing so were usually favourable, and in addition to the ordinary "look out," a Fijian, familiar with the appearance of moral water. of coral water, was always stationed at the masthead.

Charts Nos. 789, 1829 and 1830 have been cancelled.

P. J. FALLE, Condr., M.I.M. Port Officer of Calcutte.

Published for general information.

T. H. CLOWES, Under-Secretary, Marin: Department.

NOTICE TO MARINERS-No. 89.

[Second Publication.]

PACIFIC OCEAN-PHILIPPINES-LUZON ISLAND.

Port Kavits-Light on Sangley point.

THE British Admiralty has given notice (No. 147 of 1898) that a light is exhibited provisionally from the old, iron framework lighthouse on Sangley point :-

Sangley point light is a cata-dioptric, fixed red light, elevated 84 feet above high water, 28 feet above the ground, and visible from N 89° E., through east and couth, to N. 81° W. (an arc of 240), a distance of 8 miles in clear weather.

Approximate position on plan No. 975, lat. 14° 29′ 50° N., long. 120° 54′ 40° E.

Nors.—Sangley point is extending to the eastward, and the above light is eventually to be shifted nearer to the extremity of the point. Further Notice will be given when this change is carried out.

(Variation 1º Easterly in 1898.)

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcutts.

Published for general information.

T. H. CLOWRS. Under-Secretary, Marine Departs ent.

GALGUTIA, he 10th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 86.

[Third Publication.]

NEW ZEALAND-NORTH ISLAND, KATTARA HARBOUR.

Alterations in kading beacons.

THE British Admiralty has given notice (No. 125 of 1898) that the leading beacess on North head, Kaipara Harbour, were then being taken down; the two upper (north-eastern) become would be re-erected about one mile westward of their previous positions, and he lower (previous south-western) bescon would be discontinued.

Approximate new position, rear beacon, lat. 86° 22′ 15″ S., long. 174° 6′ 55″ E.

Note.—Further notice will be given when the beacons have been re-created; in the meantime Kaipara Harbour should be entered with great caution, and particular attention should be paid to any signals made from the station near the light-house.

P. J. Falla, Comdr., R.I.M., Port Officer of Calculia.

Published for general information.

T H. CLOWNS, Under-Secretary, Marine Department.

CALCUTEA, the 7th April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 87. [Third Publication.] NEW ZEALAND-COOK STRAIT.

Port Nicholson-Intended fog signal on Pencarrow Head.

The British Admiralty has given notice (No. 126 of 1898) that a fog signal apparatus is in course of erection in a position 384 feet, S. W., from Pencarrow head light-house, and at an elevation of 145 feet above the sea.

The fog signal will be explosive, and experiments may be made with it previous to its permanent establishment, of which last further notice will be given.

Approximate position, lat. 41° 21° 40" S., long. 174° 52' E.

P. J. FALLE, Comdr., Bl.M., Port Officer of Colcults.

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

CALIFORNA, the 7th April 1888.

NOTICE TO MARINERS-No. 88.

[Third Publication.]

AFRICA, EAST-RED SEA, WESTERN SHORE.

Massawa Harbour - Alterations in positions of Seraglio Island Lights.

The British Admiralty has given notice (No. 127 of 1898) that the two red lights previously shown on either side of the base of the Palace central dome, Seraglio island, have been moved, so that they are now leading lights for entering Massawa Harbour:—

1. The front light is shown from a staff at the edge of the quay, at an elevation of 40 feet above the sea, in a position with the French Consulate bearing about S.E. † H., distant 2 staff oables; and north-east angle of, Taoualoud Fort

Approximate position, lat. 15° 36′ 45° N., long. 39° 26′ 50° R.

2. The rear light is shown from the terrace at the north-east angle of the Colonial palace, at an elevation of 72 feet above the sea, and in a position bearing S. 67" W., distant 126 yards, from the front light.

Norg.-The above lights in line, bearing S. 67° W., lead into Messawa Harbour midway between the buc, s at the entrance.

(Variation 4º Westerly in 1898.)

P. J. FALLE, Comde., R.I.W., Port Officer of Calcutta.

Published for general information.

CALCUITA. the 7th April 1898.

T. H. CLOWES. Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 89.

(Third Publication.)

EASTERN ARCHIPELAGO-BORNBO, SOUTH COAST.

Amended depth on shoal southward of Melataor Point.

Tue British Admiralty has given notice (No. 133 of 1898) that a depth of 14 feet, at low water springs, has been found on the shoal, previously marked 3 fathoms on the Chart, situated in a position bearing S 9° E., distant 20 miles, from Melataor (Melatayor) Point.

Approximate position, lat. 3° 48' S., long 114° 38' E.

(Variation 2º Easterly in 1898.)

P. J. FALLE, Comdr., R.I.M., Port Officer of Calcusta.

Published for general information.

CALCUTTA, the 7th April 1898.

T. H. OLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 90.

(Third Publication.)

CHINA SEA-GULF OF STAM.

Light on Koh Chuen exhibited. With reference to Notice to Mariners No. 110, dated 28th May 1897, issued by this office, the British Admiralty has given further notice (No. 134 of 1898) that further information has been received that a light is exhibited from the light-house recently erected near the summit of Koh Chuen, eastern side of the head of the Gulf of Siam:—

Koh Chuen light is a second order, group-flashing white light with a period of twenty seconds, thus:—flash, one and a half seconds; college, three and a half seconds; it is elevated 466 feet above the sea, and visible from a distance of 29 miles in clear weather. In addition to the main light, a subsidiary flash red light is shown over Hin Chalan, the rock to the southward.

The light-house is coloured white

The light-house is coloured white.

Approximate position, lat. 12° 31′ 10" N., long. 100° 58′ 10" E.

P. J. FALLE, Comdr., R 1.M., Port Officer of Calcutta-

Published for general information.
T. H. Clowes,

Under-Secretary, Marine Department.

CALGUTTA, the 7th April 1898.

NOTICE TO MARINERS-No. 91.

[Third Publication.]

INDIA, SOUTH-CEYLOR, SOUTH COAST.

Bell Buoy at the eastern entrance to Galle Harbour shifted.

The Master attendent at Galle has given notice, dated 12th February 1898, that the Bell Buoy marking the Cadda Rocks at the eastern entrance to Galle Harbour, will, on April 15th next, be shifted due south of its present position as charted, a distance of one and half cables, and moored in 12; fathoms, distant 233 fathoms by measurement from the outer Cadda Rock in a south half east direction. Commanders of steamers approaching the Port are requested to note this and keep a position clear of the buoy until the Pilot shows his flag (white, red and white) horizontal, when it is safe to steer for the Pilot's cance. If under sail, the cance is distinguishable by the letter P on it, with the Pilot flag displayed above; should the buoy be out of position, the usual signals from the flag-staff will be hoisted to that effect.

P. J. FALLE, Comdr., E.LM., Port Officer of Coloutie.

Published for general information.

T. H. Olowns, Under-Secretary, Marine Department,

CALCUTTA, the 7th April 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MAY 4, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 103.

[First Publication.]

BAY OF BENGAL-CHITTAGONO COAST.

Chittagong river.— Depth of water found in the channels.

THE Port Officer, Chittageng, has given notice that the following depth of water was found in the river channels by soundings taken on the 23rd April and reduced to zero:—

Track No. I-Outer bar -				Feet. Inches.		
Disc in centre of diamond and tripod, cask, and ball					10	6
Track No. II Innar bar						
Disc on diamond Disc on triped, cask and ball		*		110	10	6
	***	***	***	10	0	
Track No. III-						
Tripod, cask and bal	h p 4	***	***	18	0	
Track No. 1V-						
Triangle on tripod, o	114.5	414	***	20	0	
Track No. V-						
Old marks Centre Tripod on diamond		717	***	204	17	0
	244	tre			17	0
	h#+	111	141	***	15	0
			P. J. Falle, Comdr., R.I.M., Port Officer of Calcuita.			

Published for general information.

Calcorna, the 50th April 1898.

T. H. OLOWBS.
Under-Socretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 104.

[First Publication.]

AUSTRALIA-PIONEER RIVER.

Breach at East Point Spit beacened and lighted.

The Port Master, Brisbane, has given notice (No. 8 of 1898) that the breach made by the Pioneer river through East Point Spit is beaconed and lighted for use, the old entrance being no longer marked.

Directions.—The Fairway buoy is placed in 3 fathoms off the edge of shoal water, and lies with Slade Islet bearing north and Flat Top bearing S.E., distant 5 cables. It may be passed on either side bringing two white beacons in line bearing W. § S. and pass a red

buoy to starboard, and between red and black buoys marking the gap in the stone wall through which the broach occurred; then had up sharp and steer for Mt. Bassett, bringing two white leading beacons in line ahead bearing N.W by N. ½ N. until two white beacons on East Point come in line astern leading on a N.W. by W. ‡ W. course, then proceed as before.

These beacons are lighted at night. Chart affected, No. 347, Australia Directory, vol. 2.

P. J. FALLE, Comdr., B.I.K., Port Officer of Calcutta.

Published for general information.

Calgorra, the 80th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 106.

[First Publication.]

NEW ZEALAND, SOUTH ISLAND-DAGGS SOUND.

Sunken rock off Schooner point.

THE British Admiralty has given notice (No. 159 of 1898) of the existence of a sunker rock, on which the Government steam-vessel Tatunakai touched, with a depth of 12 feet on it at low-water springs, situated one cable offshore, in a position with north-east extreme of Schooner point bearing E. by S., distant a quarter of a mile; and western extreme Seventy fathous point N. ½ E.

Approximate position, lat. 45° 25′ 10" S., long. 166° 52′ 50" E.

(Variation 16° Easterly in 1898.)

P. J. FALLE, Comdr., R.LM., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES,

CALCUTTA, the 30th April 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 106.

[First Publication.]

BAY OF BENGAL-SANDHEADS AND RIVER HOOGRLY.

Anchorage lights in river Hooghly.

THE British Admiralty has given notice (No. 178 of 1898, paragraph 3) that, on 1st April 1898, the undermentioned anchorage lights would be shown in the river Hooghly:-

(a) Kalpi anchorage (Jigerkolli) light is a fixed white light, elevated about 12 fee, above the water, and visible from about North, through west, to S.S.W., at distance of 5 miles in clear weather.

It is situated near the surveying beacon about half a mile eastward of Jigerkolli obelish Approximate position, lat. 22° 6′ 0" N., long. 88° 11′ 15" E.

(b) Kantabaria point light is a fixed red light, elevated 16 feet above the water visible 5 miles in alear weather, and shown either from Kantabaria obelisk, or from a mast close to it.

Approximate position, lat. 22° 8′ 0° N., long. 88° 12′ 40" E.

(c) Diamond harbour lights are two fixed red lights, visible 2 to 3 miles in dear weather, one shown from the yard arm of the Telegraph office, the other from abreast the Custom-house trees, at an elevation of about 14 feet above the

Approximate position, Telegraph office, lat. 22° 11′ 30" N., long. 88° 11° 5" E.

(d) Fisherman's point light is a fixed red light, elevated 14 feet above the water, visible 2 to 3 miles in clear weather, and shown from the western bank of the river abreast Fisherman's anchorage.

Approximate position, lat. 22° 19′ 40" N., long. 88° 5′ 30" E.

(Variation 5° Easterly in 1898.)

P. J. Falle, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

T. H. OLOWES, Under-Secretary, Marine Department.

OALCUTTA, the 30th April 1808.

NOTICE TO MARINERS-No. 107.

[First Publication.]

CHINA SEA-PESCAPORES ISLANDS.

(1) Sunken rock north-eastward of Ragged island.

THE British Admiralty has given notice (No. 179 of 1898) that a sunken rock, on which the sea breaks, is reported to exist in a position with Ragged island bearing S.W. 1 S., distant 4 cables; and south extreme of Organ island W. 4 N.

Approximate position, lat. 23° 36′ 30" N., long. 119° 41′ 45" E.

The symbol for a rock with less than 6 feet water on it, with the word "breaks" written against it, has been placed on the Admiralty Chart in the above position.

Also, that the sunken rock, shown on the chart nearly a mile, north-eastward, from Organ island, extends about a quarter of a mile north and south.

(2) Rocks northward of North rocks.

Also, that the undermentioned rocks exist northward of North rocks :--

- (a) Niyake sho, a sunken rock, on which the steam-vessel Nara maru was wrecked in 1897, is situated about a mile northward of North rocks, in approximately lat. 23° 48′ 0″ N., long. 119° 34′ 50″ E.
- (b) Higashiyake sho, a rock above water, in approximately lat. 23° 48′ 20° N, long.
- (c) Oyake sho, a rock above water, in approximately lat. 23° 48′ 10" N., long. 119° 34′ 20" E.

Norm.-The two masts of the Nara manu are reported to be still standing, and the upper part of the wreck shows at low water.

(Variation nil in 1898.)

P. J. FALLE, Comdr., RI.M. Port Officer of Calcutta.

Published for general information.

OALGUTTA, the 30th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 108.

[First Publication.]

BAY OF BENGAL-AND ARABIAN SEA.

Alterations in storm signals at ports of India,

The British Admiralty has given notice (No. 182 of 1898) that the undermentioned system of storm signals is being adopted for all the ports of India, with the exception of those in the river Hooghly, and with that exception the previous systems have been discontinued :---

DAY SIGNALS.

1. CAUTIONARY.—BAY OF BENGAL.—The square flag W of the International Code, hoisted at the storm signal staff, indicates the existence of disturbed squally weather in the Bay of Bengal, which may be the first stage in the formation of a cyclonic storm, and which, if it develops, is likely to affect that part of the coast on which the port, where the signal is shown, is situated is shown, is situated.

Arabian Sea.—The square flag W of the International Code, hoisted at the storm signal staff, indicates the existence of disturbed wouther off the west coast of India near the port or ports where the signal is shown; or the advance of a cyclonic storm across Hindustan from the Bay of Bengal, which may shortly give squally or stormy weather in the Arabian

In either of the above cases if the disturbed conditions pass away without producing dormy weather, the cautionary signal is hauled down; but if the disturbed weather will probably develop into a cyclone, signals indicating the probable position, character, and tract

of the approaching storm are shown as follows.

2. Warning Signal.—A ball indicates that a cyclonic storm has formed, which will probably reach the port where the signal is shown, but is still at a considerable distance from it.

The same signal will also be shown at more important ports on the west coast of India, to indicate that a storm has formed in the Arabian sea at some distance from the coast and will shortly cross one or other of the track of vessels leaving those ports, but will not reach such ports. The Port officer will receive details to communicate to vessels leaving the port.

8. Danger Signals.— (a) A cone, aper downwards, indicates that a cyclonic storm.

8. Danger Signals.— (a) A cone, aper downwards, indicates that a cyclonic storm, probably slight to moderate, is affecting the port, and that its centre will probably cross the coast considerably to the southward.

(b) A cone, apex upwards, indicates that the centre of such a storm, as above (3 a), will probably cross the coast considerably to the northward.

(c) A drum indicates that the centre of such a storm as above (3 a) will probably pro-

the coast over or near the port.

GERAT DANGER SIGNALS. - (a) A cone, apex downwards, over a ball, indicates that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the southward.

(b) A cone, apex upwards, over a ball, indicates that the centre of such a storm as above (4 a) will probably cross the coast considerably to the northward.

(c) A drum, over a ball, indicates that the centre of such a storm as above (4 a) will probably cross the coast over or near the port.

NIGHT SIGNALS.

1. No cautionary signals are shown at night.

2. A red light indicates similarly to warning signal (2) above.
3. (a) A red light placed vertically over a white light indicates similarly to danger signal 3 a above.

(b) A white light placed vertically over a red light indicates similarly to danger signal

(c) Two red lights, placed vertically, indicate similarly to danger signal S c above.

4. (a) Two red lights placed vertically over a white light indicate similarly to great danger signal 4 s above.

(b) A white light over two red lights placed vertically, indicates similarly to great

(b) A while light over the danger signal 4 b above.

(c) Three red lights, placed vertically indicate similarly to great danger signal 4c above.

P. J. Falls, Comdr., El.M.,

Port Officer of Calcuita.

Published for general information.

UALOUTTA, the 30th April 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL, - MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 100.

(Second Publication.]

CHINA SEA-Hong-Kong.

Alterations in Storm Signals.

WITH reference to Notice to Mariners No. 178, dated 18th September 1897, issued by this Office, the British Admiralty has given further notice (No. 148 of 1898) that the Storm Signals given in the above Notice have been discontinued; and the former Storm Signals, as given at pages 78-79, China Sea Directory, Vol. III, 1894, have been re-established.

P. J. FALLE, Comdr., E.I.M., Port Officer of Calculla.

Published for general information.

Catoures, the 23rd April 1898.

T. H. OLOWES Under-Secretary, Marine Department

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 101.

[Second Publication.]

PACIFIC OCEAN-SANDWICH ISLANDS-OAHU.

Honolulu approach-Intended light on Leahi (Diamond head).

THE British Admiralty has given notice (No. 159 of 1898) that information has been received that a light will be exhibited from a lighthouse to be erected on Leahi (Diamond Head), eastern approach to Honolulu:-

Leahi (Diamond Head) light will be a third order, dioptric, fixed light with sectors; showing white over an are of 184°, and read over two area of 13°, one on each side of the white sector; it will be clevated 147 feet above the sea and visible in clear weather from a limit of the sector. distance of 20 miles.

The lighthouse, an open, frame-work tower, will be situated about 250 yards westward of the signal station.

Approximate position, lat. 21° 15′ 35° N., long. 157° 48′ 40" W.

P. J. FALLE, Comdr., R.L.M., Port Officer of Calcutts.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

CALCUTTA, the 23rd April 1898.

NOTICE TO MARINERS-No. 102. (Second Publication.)

BAY OF BENGAL-BURNA COAST-GULF OF MARTABAN.

Exhibition of Amherst point light further postponed.

WITH reference to Notice to Mariners, No. 69, dated 12th March last, issued by this Office, a telegraphic communication has been received from the Port Officer, Rangoon, stating that the exhibition of Amherst point light has been further postponed to 6th June next.

P. J. FALLE, Comdr., R.t.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWES, Buder-Soorsiary, Marine Department.

CALCUSTA, the 23rd April 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT,

NOTICE TO MARINERS-No. 92.

[Third Publication.] AUSTRALIA-EAST COAST.

(1) Clereland Bay-Light near quarantine station jetty.

The British Admiralty has given notice (No. 136 of 1898) that a fixed white light of small power, visible between the bearings of N. 73° E. (over No. 2, black buoy) and N. 34° E. (over black, cage buoy), is shown from a platform, situated near the quarantine station jetty on the west side of Magnetic island.

Approximate position, lat. 19° 8′ 15° S., long. 146° 47′ 5° E.

(2) Prince of Wales Channel-Beacon on Ipili Reef blown down.

Also, that the beacon on Ipili roof, northward of the east end of Goode island, has been blown down. It would be re-erected as soon as possible, of which further Notice will be given.

Approximate position, lat. 10° 324° 0° S., long. 142° 10° 15" E.

(Variation 7º Basterly in 1898.)

P. J. FALCE, Comde., B.I.M., Fort Officer of Calculta.

Published for general information.

T. H. CLOWNS, Under-Secretary, Marine Department.

CALCUTTA, the 16th April 1898.

GOVERNMENT OF BENGAL-MABINE DEPARTMENT.

NOTICE TO MARINERS-No. 93.

(Third Publication.)

JAPAN-Krusiv.

Karatsu no ura-Sunken rocke.

The British Admiralty has given notice (No. 187 of 1898) of the existence of the undermentioned sunken rocks, in the north-eastern part of Karatsu no ura, northern coast

1. A rock, named Tautan ee, with a depth of 3 fathoms on it, situated with the west extreme of Keya saki bearing N. by W. 3 W., distant 2 n miles; and Ko. Fusi yama (1267) N. E. by E. 2 E.

Approximate position, lat. 33° 32′ 50° N., long. 130° 6′ 0° E.

2. A rock, with a depth of 5 fathoms on it, situated in a position bearing S. E. & S. distant 11 cables from rock (1); or with Keys saki bearing N. N. W. & W., distant 3 to miles.

Rocks above and below water extend about 3 cables southward of the point projecting the middle of the north shore of Funggo shi,

(Variation 4° Westerly in 1898.)

P. J. FALLE, Comdr., R.I.M., Port Officer of Oakusta.

Published for general information.

Calcutta, the 18th April 1898. T. H. Clowss, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 94. [Third Publication.]

PERSIAN GULF, WRSTERN SHORE-BAHREIN HARBOUR.

Amended depth on shoul to the north-eastward.

The British Admiralty has given notice (No. 138 of 1898) that information has been received from the Communder of the R.I.M. steam-vessel Laurence, dated 9th February 1898, that he obtained soundings of 4½ and 4½ fathoms, on the shoal hitherto marked with 5-fathom depths on the Chart, situated in a position bearing N.N.E. ½ E., distant 22 miles, from the northern point of Muharrak island eastern side of Fahrein harbour.

Approximate position, lat. 26° 37' N., long. 50° 50' E.

The words "Depths of 4; and 4; fathoms reported on this shoal" have been written on the Chart against the above shoal.

(Variation nil in 1898.)

P. J. FALLE, Comde., R.I.M., Port Officer of Caloutta.

Published for general information.

T. H. CLOWES,

CALCUTTA, the 16th April 1898.

Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 95.

[Third Publication.]

EASTERN ARCHIPELAUQ-JAVA, NORTH COAST.

Batavia approach—Sunken rock routh-castward of Rotterdam island.

The British Admiralty has given notice (No. 139 of 1898) of the existence of a rock, about three-quarters of a cable in extent, with a depth of 2 fathems on it, and 9 fathems near, situated with the south extreme of Rotterdam island bearing N. 71° W., distant 31 cables.

Approximate position, lat. 6° 0′ 10° S., long. 106° 44′ 50° E.

(Variation 1º Eauterly in 1898.)

P. J. Falle, Comdr., R.I.M., Port Officer of Calcutta.

CALCUTTA, the 18th April 1898.

Published for general information.

T. H. Clowes,

Under-Societary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 96.

[Third Publication.]

AFRICA, KAST-RED SEA, WESTERN SHORE.

The British Admiralty has given notice (No. 140 of 1898) that information has been received from Lieutenant and Commander H. J. Gedge, H.M. surveying vossel Stork, that, on passing the spit extending off Shab Shakhs, on 31st January 1895, the buoy (conics, red) previously marking the extremity of the spit was not in position, nor could it be seen either northward or southward of the locality.

Approximate position, extremity of spit, lat. 14° 414' N., long. 41° 6' E.

P. J. FALLE, Comde., R.I.M., Port Officer of Calcutts.

Published for general information. T. H. CLOWES,

OALCUTTA, the 18th April 1898.

Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 97.

[Third Publication.]

AFRICA, BAST COAST-DELAGOA BAY.

Gibbon point beacon fallen down.

The British Admiralty has given notice (No. 141 of 1898) that Gibbon point leason has fallen down, and a new beacon would be erected there.

Approximate position, lat. 25° 58′ 5″ S., long. 32° 54′ 10″ E.

P. J. FALLE, Comdr., R.LM. Port Officer of Ocicutta.

Published for general information.

T. H. CLOWER, Under-Secretary, Marine Department.

CALCOTTA, the 16th April 1898.

NOTICE TO MALINERS-No. 98.

[Third Publication.]

SOUTH PACIFIC OCEAN.

Particulars of certain banks.

The British Admiralty has given notice (No. 145 of 1898) that the undermentioned particulars of certain banks in the South Pacific Ocean are derived from recent examinations. by Captain A. Mostyn Field, H.M. surveying vessel Praguin :-

(1) Lalla Rookh Bank, originally discovered and sounded on by Sir Edward Home, H.M.S. North Star, is 3½ miles long north-east and south-west, with an extreme broadth of 1½ miles.

The north east end of the bank is in approximately lat. 12° 54′ 30″ S., long. 175° 38′ W., with general depths of 10 to 14 fathoms on it, over a sand and coral bottom.

The central portion of the bank is slightly deeper than the rim, but not very markedly so. From the adge the soundings drop down steeply to

depths between 200 and 300 fathoms.

Whilst at anchor on this bank (October 1897) the current was found to set between W.N.W. and S.S.E., from a half to one and a quarter knots. The southerly set was most pronounced between 3h. and 8h. after high water at Wallis island.

(2) Hown Knoll, named after Captain Sir Edward Home, was found by H.M.S. Penguin while searching for Lalla Rookh bank.

It is a small coral knoll, extending east and west about one mile between the 100 fathom limits, by little more than half a mile in breadth, with a least depth of 10 fathoms on it, and general depths of 12 to 16 fathoms, over a sand and ooral bottom.

Its centre is in approximately bet. 12° 544′ S., long. 175° 861′ W., and it is situated one mile eastward from the north-east end of Lalla Rookh bank with soundings of from 200 to 300 fathoms between

The 1.000-fathom line encircles the two banks, Lalla Rockh and Home knoll, at distances varying from 11 to 3 miles.

(3) Pasco Bank, reported by several vessels as situated between Savaii and Wallis islands, and marked "7 P. D." on the Admiralty Charts, is 5 miles in width at its eastern end, from whence it extends nearly 20 miles in a westerly direction. tion, narrowing to a width of 3 miles in its centre, westward of which it contracts to a breadth of three-quarters of a mile, thence broadening out and forming a narrow ridge.

The general depths in the centre are from 22 to 27 fathoms, and and coral, with a shallow rim of growing coral running round its outer margin, having depths of 8 to 10 fathoms on it. The shoalest soundings, 7 fathoms, were found on the southern edge of the bank, where it is most contracted in width. On all sides it drops down steeply into depths of from 200 to 400 fathoms.

The western extreme of this bank is situated in approximately lat. 13° 4 S., long. 174° 371′ W.

Whilst at anchor on this bank (October 1897) the current was found to

set from N.W. to S.W. from a half to one and a quarter knots.

(4) Firms Bank, probably identical with a bank reported in 1874 by Captain Turpie of the Missionary barque John Williams, was examined by H.M.S. Penguin in October 1897, and as there is already a Turpie bank in this vicinity, the name of Field has been given to it.

Its eastern extremity is situated in approximately lat. 12° 16½° S., long. 174° 43½° W., and the bank thence extends W. by S. ½ S. for 6½ miles, with a breadth of 2½ miles towards the centre, and contracted at the eastern end to a narrow ridge, which is 2 miles long and barely half a mile in width.

The least water found was 13 fathoms, situated on its northern edge; the general depths over the shallow run encircling the bank range from 14 to 16 fathoms, and the depths in the gentre from 18 to 21 fathoms, over a sand and ooral bottom.

The edge of the bank drops steeply on all sides into depths of from 200 to 300 fathoms.

It lies S.W. by S., distant 14 miles, from Tavani bank, with soundings of upwards of 1,200 fathoms between.

The shoal to which the name Turpie was attached having been previously shown 50 miles northward of this position on the Admiralty search was made by the Penguin over a considerable area in that locality, but no sign of shoal water was found there. It has therefore been expunged.

(5) TAVIUMI BANK, originally reported by the schooner of that name, is a small oval-shaped bank of sand and coral. 2 miles long. E. & N. and W. & S., within the 100-fathom limits, and upwards of a mile broad.

Its centre is situated in lat. 12° 6′ 8, long. 174° 341′ W. The least vater found by H.M.S. Penguin was 9 fathoms, the depth over the greater portion of the bank ranging from 11 to 14 fathoms.

Outside the 20-fathom line it drops steeply down to depths of over 100

fathoms, the 1,000-fathom line maintaining a distance of 2 miles from it all round.

Whilst at anchor on this bank (September 1897) the current was setting N.W., half a knot.

(6) Robbie Bank, originally reported by the Master of the schooner Taviuni in 1888, is nearly circular in shape, 8 miles in diameter, and situated with its centre in approximately lat. 11° 8′ S., long. 176° 53′ W.

It is composed of sand and coral, and is of the usual atoll-like formation, which is such a common feature in all these banks, having general depths of 26 to 29 fathoms over its central portion, with a shallower rin, running round the edge, of growing coral, about one mile in width within the 20-fathom line, with depths of 10 to 15 fathoms over it.

The shallowest part is on the north-western edge where to is rim rises to depths of 7 and 8 fathoms for a distance of about 2 miles along its periphery.

The edge of this bank drops down steeply on all sides, within a very short distance, to depths of from 200 to 300 fathoms.

Whilst at anchor on this bank (November 1897) the current varied conaiderably. East and S. E. currents, from a half to three quarters of a knot, occasionally setting to windward against a fresh E.N.E. wind.

(7) ADOLPH SKOLL, originally reported by the German schooner Auclph, is a small coral bank, one mile in extent, rising steeply from depths of 800 to 400 fathoms, with a least depth of 13 fathoms on it on its western side.

Its centre is situated in approximately lat. 11° 541' S., long. 178° 94' W. and it bears S.E., distant 3 miles, from Tuscarora bank, with soundings of from 300 to 400 fathoms between.

(8) Tuscarora hank, discovered by H.M.S. Penguin, is situated with its centre in approximately lat. 11° 48% S., long. 178° 14' W.

It is 10 miles long, east and west, and about 6 miles broad, having depths of 26 to 29 fathoms, sand and ceral, over its central portions, with a shallower rim of growing coral, over which the general depths are 20 to 22 fathoms.

On the south-western edge there is a shallower patch of 14 fathoms, and on the northern edge a patch of 16 to 18 fathoms. The bank drops down steeply on all sides into depths of more than 200 fathoms.

Whilst at anchor on this bank (November 1897) the ourrent varied in direction between W.N.W. and South, with a rate of from a quarter to The southerly current commenced with great regularity one knot each day 3 hours after the moon's passage and continued for 6 hours, showing that these variations are due to tide.

Both the Adolph knoll and the Tuscarora bank appear to stand on an extensive deep bank, the 1,000-fathom limit of which it was not practicable to determine.

Norge.—Captain Field remarks that in no single instance was the presence of any of these banks detected from the masthead, although the conditions for doing so were usually favourable, and in addition to the ordinary "look out," a Fijian, familiar with the appearance of coral water, was always stationed at the masthead.

Charte Nos. 780, 1829 and 1830 have been cancelled.

P. J. FALLE, Comdr., R.I.M., Port Officer of Calculla.

Published for general information.

T. H. CLOWES, Under-Secretary, Marine Department.

NOTICE TO MARINERS-No. 90.

[Third Publication.]

PACIFIC OCEAN-PHILIPPINES-LUZON ISLAND.

Port Kavits-Light on Sangley point.

The British Admiralty has given notice (No. 147 of 1898) that a light is exhibited promisionally from the old, iron framework lighthouse on Sangley point:—

Sangley point light is a cata-dioptric, fixed red light, elevated 34 feet above high water, 28 feet above the ground, and visible from N 89° E., through east and south, to N. 31° W. (an arc of 240), a distance of 8 miles in clear weather.

Approximate position on plan No. 975, lat. 14° 29′ 50° N., long. 120° 54′ 40" E.

Nors.—Sangley point is extending to the eastward, and the above light is eventually to be shifted nearer to the extremity of the point. Further Notice will be given when this change is carried out.

(Variation 1º Easterly in 1898.)

P. J. Falle, Comdr., R.I.M., Port Officer of Calculla.

Published for general information.

T. H. OLOWES, Under-Secretary, Marine Department.

OMLOUTTA, the 16th April 1898.



APPENDIX TO

The Calcutta Gazette.

WEDNESDAY, MAY 11, 1898.

NOTICES TO MARINERS.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 109. [First Publication.]

BAY OF BENGAL.

Erratum.—In the heading of Notice to Mariners No. 85, dated 1st April last, for "Andaman and Nicobar islands" read Gulf of Martaban, and in paragraphs 1, 2 and 3 for "east" read cast and for "Kennangi S. Peak" read Krunangi S. Peak.

P. J. FALLE, Condr., R.I.M., Port Officer of Calcutta.

Published for general information.

CALCOTTA, the 9th May 1898.

T. H. CLOWES, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 110.

[First Publication.]

BAY OF BENGAL-GULF OF MARTABAN.

Position of certain shoals.

THE Officer in charge of the Marine Survey of India has given additional notice that shoals Nos. 2 and 3, reported in Notice to Mariners, Bay of Bengal, No. 85, dated 1st April 1898, issued by this office, have been further examined with the following results:—

No. 2 is 4} miles long in a N. \$ E. and S. \$ W. direction and \$ mile broad with from 6 to 9 fathoms on it.

The southern end lies in Lat. 15° 011' N., Long. 97° 351' E., with

Phalein Hill (1610) bearing ... N. 31 E. ... N. 72 E. ... S. 77 E. 471 Summit Pig island Krunangi S. Peak (2580) ... ***

The northern end lies in Lat. 15° 06' N., Long. 97° 36' E., with

Phalein Hill (1610) bearing 440 Summit Pig island Krunangi S. Peak (2580) 8. 78 E. S. 62 E.

No. 3 is 4 miles long in a N. by E. and S. by W. direction and 2 mile broad with from 5 to 8 fathoms on it.

Its southern end lies in Lat. 14° 514′ N., Long. 97° 204′ E., with Krunangi S. Peak (2580) bearing N. 78 E., distant 31 miles.

Its northern end lies in Lat. 14° 554′ N., Long. 97° 21′ E., with Krunangi S. Peak (2580) bearing N. S5 E., distant 30 miles.

A sheal of small extent, having 61 fatherns on it, has been discovered in Lat. 15° 08′ N.,

A short of small extent, having 61 fathoms on it, has been discovered in Lat. 15° 08' N., Long. 97° 381' E., with Phalein Hill (1610) bearing N. 36 E.

Summit Stag island Summit Pig island ... N. 67 E. S. 57 E.

All bearings are true. Charts affected—Nos. 828, 830, 70, Sailing Directions, Bay of Bengal Pilot, Second Edition, 1892, page 362.

P. J. FALLE, Comdr., R.I.M. Port Officer of Calcutta

Published for general information.

CALCUTTA, the 9th May 1898.

T. H. Clowes, Under-Secretary, Marine Department,

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 111.

(First Publication.)

ARABIA-GULF OF ADEN, NORTH COAST.

Aden harbour-Mardat Shoal light-cossel sunk.

THE Bombay Government has given notice (No. 46 of 1898) that telegraphic information has been received from the Port Officer, Aden, deted 22nd April 1898, that the Marbat Shoal Light-vessel showing two lights fixed red vertical has sunk.

Mariners are cautioned accordingly.

P. J. Falle, Comdr., s.I.M., Port Officer of Calcutta.

Published for general information.

T. H. CLOWRS. Under-Secretary, Marine Department.

CALCUTTA, the 9th May 1898.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 112. [First Publication.]

INDIA-BAY OF BENGAL.

Non-existence of rock N .- W. of Table island.

THE Bombay Government has given notice (No. 42 of 1898) that a careful search has been made by the Indian Marine Survey under exceptionally favourable circumstances for the rock two miles N.W. of Tables Island, on which the S.S. Medusa is reported to have struck, without success. It is therefore considered probable the Master of the Medusa underestimated his distance from the light hourse. estimated his distance from the light-house

The Light-house Keeper reports that ships constantly pass close to the rocks with three fathoms on them lying twelve cables N.W. of the light-house, shown on Admiralty Chart No. 825. Vessels are hereby cautioned to keep well to the northward of Table Island, as the

tides in this locality are strong and often set on to the rocks.

From the wreck the light-house bears N. 28 W. (true), distant 94 cables, and shows signs

of rapidly breaking up.

P. J. FALLE, Comdr., B.I.M., Port Officer of Calcutta.

Published for general information.

CALCUTTA, the 9th May 1898.

T. H. CLOWIER, Under-Secretary, Marine Department.

GOVERNMENT OF BENGAL-MARINE DEPARTMENT.

NOTICE TO MARINERS-No. 113.

[First Publication.]

NEW ZEALAND-NORTH ISLAND-HAURAKI GULF.

Sunken week southward of Tiri Tiri Matangi.

THE British Admiralty has given notice (No. 187 of 1898) that the wreck of the barquentine Wastemata lies sunk in the fairway in a depth of 13 fathoms, with masts showing above water, in a position with Tiri Tiri Matangi lighthouse bearing N. by E. ‡ E., distant about 4 miles.

An iron buoy, painted black, has been placed near the wreck.

Approximate position, lat. 36° 40′ S., long. 174° 523′ E.

(Variation 14° Easterly in 1898.)

P. J. FALLE, Comde., 2.1.M., Port Officer of Calcutta.

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OALCUTTA, the 9th May 1888.

T. H. OLOWES, Under-Secretary, Marine Department.